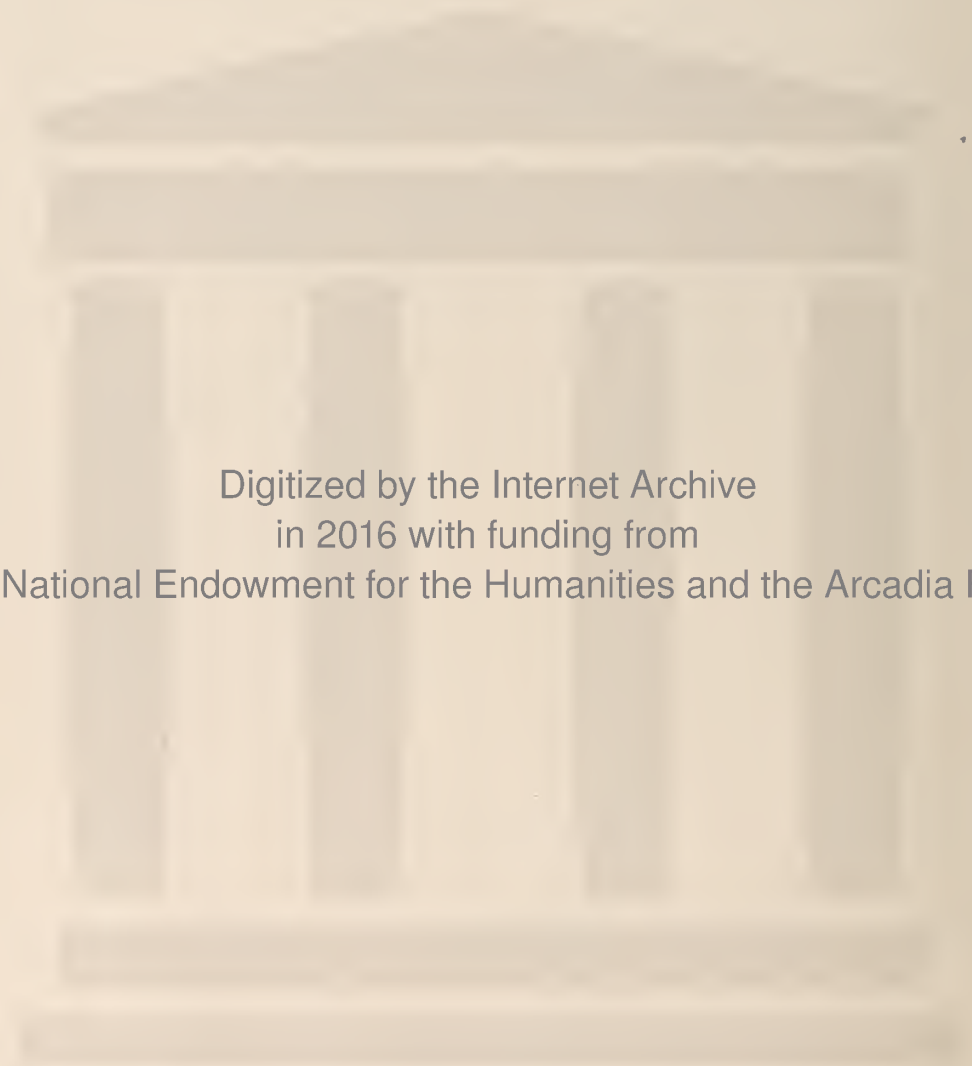
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KENTUCKY MEDICAL JOURNAL

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ACADEMY OF MEDICINE JAN 2 1943

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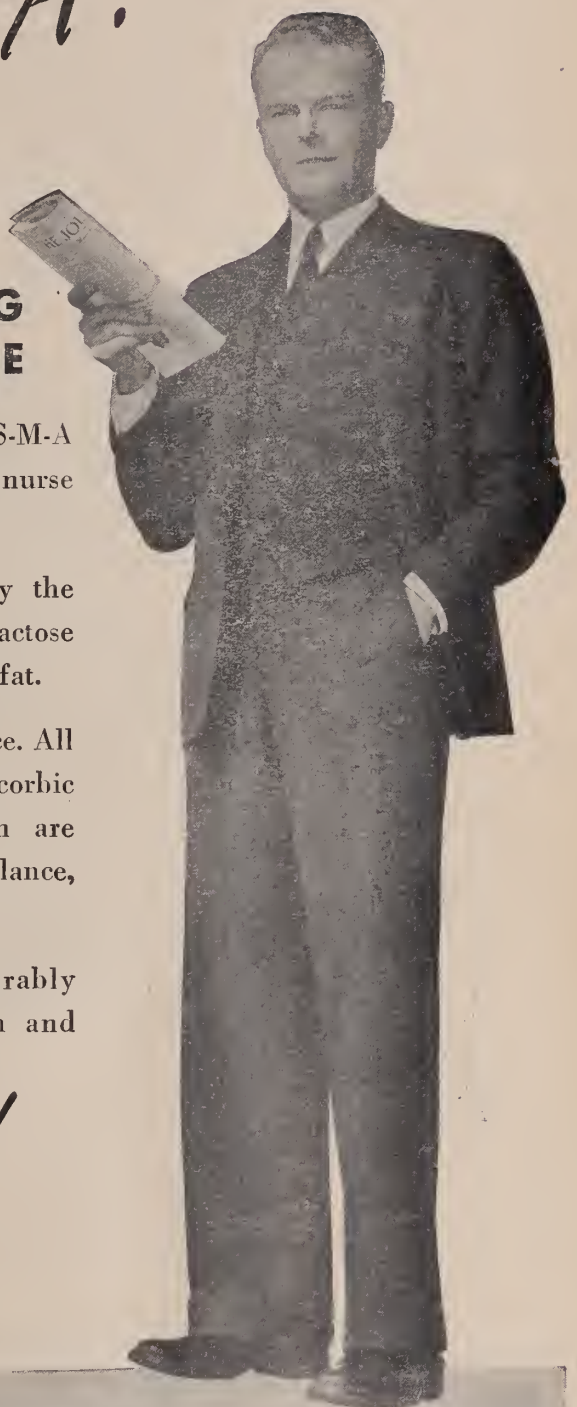
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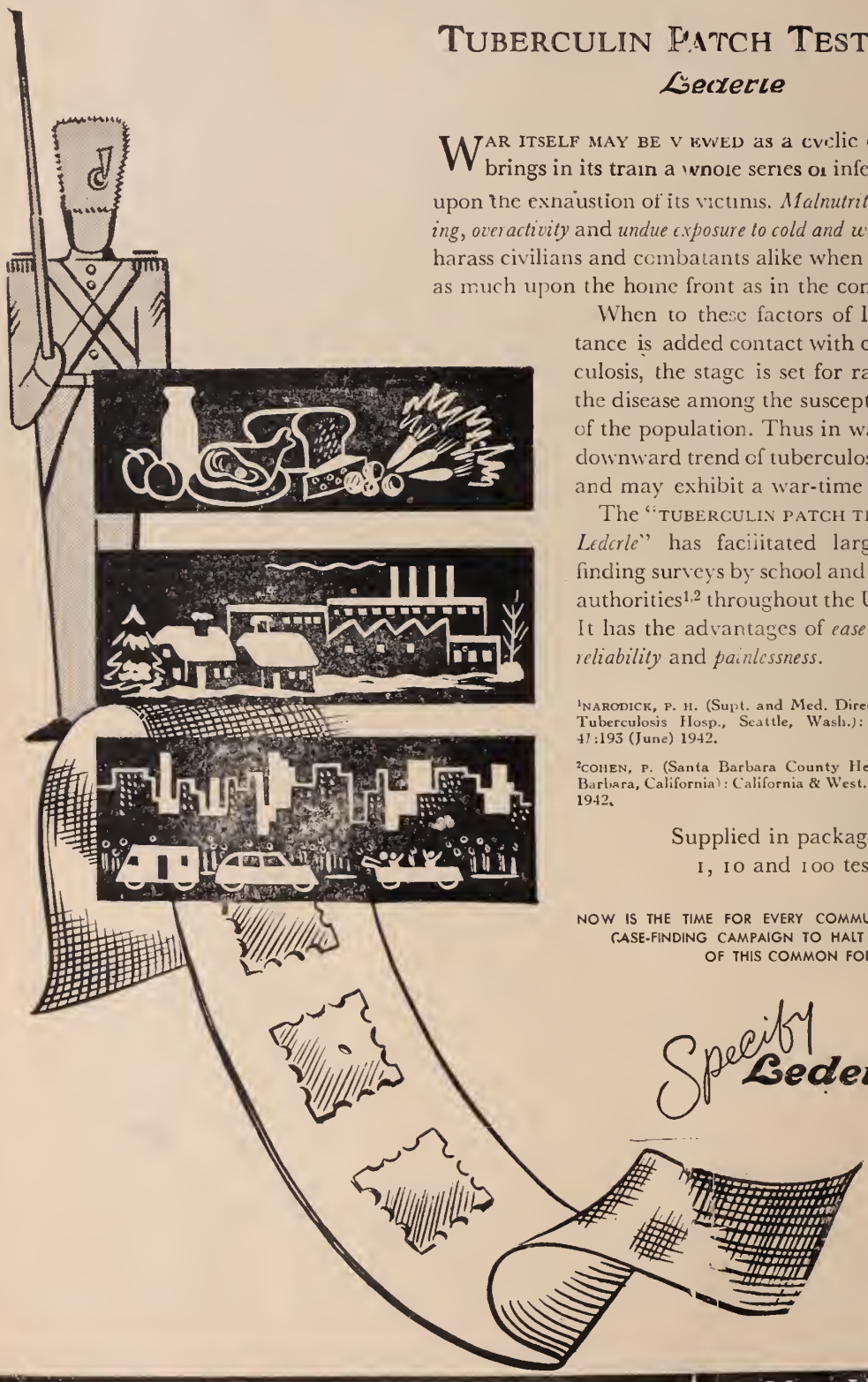
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[1]NARODICK, P. H. (Supt. and Med. Director, King County Tuberculosis Hosp., Seattle, Wash.): Northwest Med. 41:193 (June) 1942.

[2]COHEN, P. (Santa Barbara County Health Dept., Santa Barbara, California): California & West. Med. 56:70 (Feb.) 1942.

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Brückner, H.—Die Biochemie des Tabaks, 1936
The Military Surgeon, Vol. 89, No. 1, p. 5, July, 1941

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COUNTY	SECRETARY	RESIDENCE	DATE
Adair	W. Todd Jefferies	Columbia	January 6
Allen	A. O. Miller	Scottsville	January 27
Anderson	J. B. Lyen	Lawrenceburg	January 4
Ballard	F. H. Russell	Wickliffe	
Barren	C. A. Markwood	Glasgow	January 20
Bath	H. S. Gilmore	Owingsville	January 11
Bell	Edward S. Wilson	Pineville	January 8
Boone	R. E. Ryle	Walton	January 20
Bourbon	George M. Jewell	Paris	January 21
Boyd	R. G. Gulley	Ashland	January 5
Boyle	P. C. Sanders	Danville	January 19
Bracken-Pendleton	W. A. McKenney	Falmouth	January 28
Breathitt	M. E. Hoge	Jackson	January 19
Breckinridge	J. E. Kincheloe	Hardinsburg	
Bullitt	George B. Hill	Mt. Washington	
Butler	D. G. Miller, Jr.	Morgantown	January 6
Caldwell	W. L. Cash	Princeton	January 5
Calloway	J. A. Outland	Murray	
Campbell-Kenton	Robert L. Blitz	Newport	January 7
Carlisle	E. E. Smith	Bardwell	January 5
Carroll	H. Carl Boylen	Carrollton	January 12
Carter	Don E. Wilder	Grayson	January 12
Casey	Wm. J. Sweeney	Liberty	January 28
Christian	F. T. Harned	Hopkinsville	January 19
Clark	H. R. Henry	Winchester	January 15
Clay	L. H. Wagers	Manchester	
Clinton	S. F. Stephenson	Albany	January 16
Crittenden	C. G. Moreland	Marion	January 11
Cumberland	W. F. Owsley	Burkesville	January 6
Daviess	T. H. Milton	Owensboro	January 12 & 26
Elliott			
Estill	Virginia Wallace	Irvine	January 13
Fayette	Douglas E. Scott	Lexington	January 12
Fleming	Roy Orsburn	Flemingsburg	January 13
Floyd	Robert Sirkle	Weeksbury	January 27
Franklin	B. B. Baughman	Frankfort	January 7
Fulton			January 13
Gallatin	J. M. Stallard	Sparta	January 21
Garrard	J. E. Edwards	Lancaster	January 21
Grant	Wallace Byrl	Williamstown	January 20
Graves	H. H. Hunt	Mayfield	January 5
Grayson	E. B. Deweese	Caneyville	
Green	S. J. Simmons S. J. Simmons	Greensburg	January 4
Greenup	Virgil Skaggs	Russell	January 8
Hancock	F. M. Griffin	Hawesville	January 4
Hardin	D. E. McClure	Elizabethtown	January 14
Harlan	W. R. Parks	Harlan	January 16
Harrison	W. B. Moore	Cynthiana	January 4
Hart	Maher Speevack	Munfordville	January 5
Henderson			January 11 & 25
Henry	Owen Carroll	New Castle	January 14
Hickman	H. E. Titsworth	Clinton	January 7
Hopkins	Wm. H. Garnier	Madisonville	January 14
Jackson			January 2
Jefferson	Marion F. Beard	Louisville	January 4 & 18
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Johnson	A. D. Slone	Paintsville	January 25
Knott			
Knox	T. R. Davies	Barbourville	January 21
Larue			
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Lawrence	L. S. Hayes	Louisa	January 18
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Letcher	Owen Pigman, Acting Sec.	Whitesburg	January 26
Lewis	Elwood Esham	Vanceburg	January 18
Lincoln	Lewis J. Jones	Hustonville	January 15
Livingston			
Logan	E. M. Thompson	Russellville	
Lyon	H. H. Woodson	Eddyville	January 5
McCracken	Leon Higdon	Paducah	January 27
McCreary	R. M. Smith	Stearns	January 4
McLean	F. L. Johnson	Livermore	January 14
Madison	Max E. Blue	Richmond	January 21
Magoffin	Loyd M. Hall	Salyersville	
Marion	Nelson D. Widmer	Lebanon	January 26
Marshall	S. L. Henson	Benton	January 20

COUNTY	SECRETARY	RESIDENCE	DATE
Martin			
Mason	C. W. Christine	Maysville	January 13
Meade	S. H. Stith	Brandenburg	January 28
Menifee	E. T. Riley	Frenchburg	
Mercer	J. Tom Price	Harrodsburg	January 12
Metcalfe	E. S. Dunham	Edmonton	
Monroe	Geo. E. Bushong	Tompkinsville	
Montgomery	D. H. Bush	Mt. Sterling	January 12
Morgan			
Muhlenberg	E. L. Gates	Greenville	January 12
Nelson	Keith Crume	Bardstown	January 20
Nicholas	T. P. Scott	Carlisle	January 18
Ohio	Oscar Allen	McHenry	January 6
Oldham			January 5
Owen	K. S. McBee	Owenton	January 7
Owsley	W. H. Gibson	Booneville	January 4
Perry	Lewis C. Coleman	Hazard	January 11
Pike	S. B. Casebolt	Pikeville	January 7
Powell	I. W. Johnson	Stanton	January 4
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Robertson	Logan T. Lanham	Mt. Olivet	
Rockcastle			January 5
Rowan	A. W. Adkins	Morehead	January 11
Russell	J. R. Popplewell	Jamestown	January 11
Scott	F. W. Wilt	Georgetown	January 7
Shelby	C. C. Risk	Shelbyville	January 21
Simpson	L. R. Wilson	Franklin	January 12
Spencer	M. H. Skaggs	Taylorsville	
Taylor	L. S. Hall	Campbellsville	January 7
Todd	B. E. Boone, Jr.	Elkton	January 6
Trigg	Elias Futrell	Cadiz	
Trimble			
Union	E. Bruce Underwood	Morganfield	January 5
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Washington	J. H. Hopper	Willisburg	January 20
Wayne	Frank L. Duncan	Monticello	
Webster	C. M. Smith	Dixon	January 29
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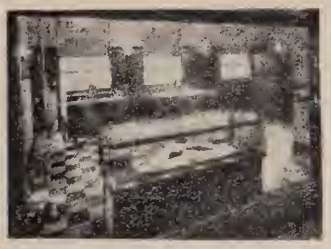
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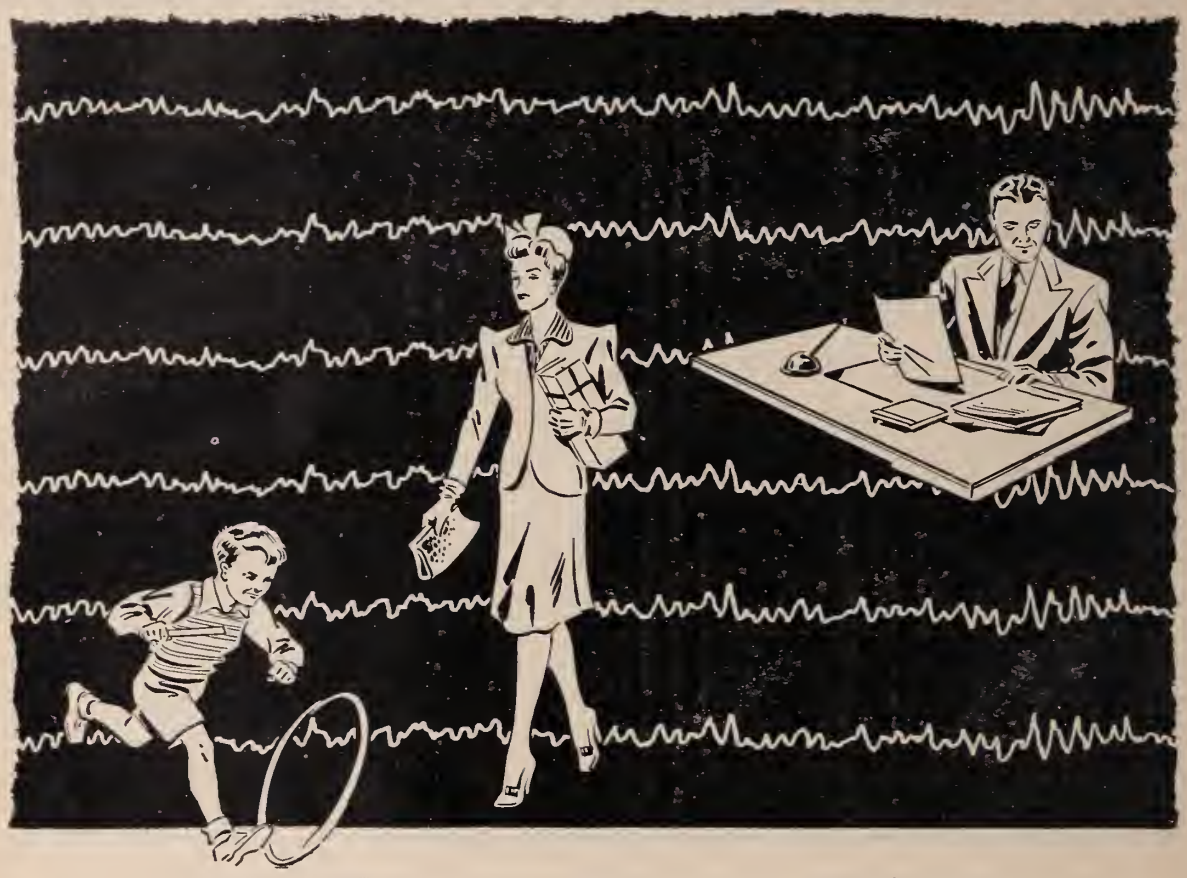
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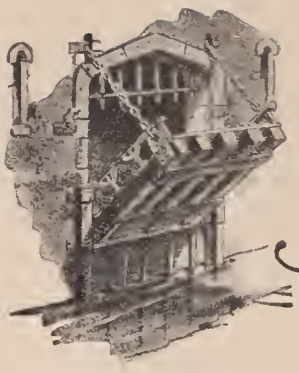
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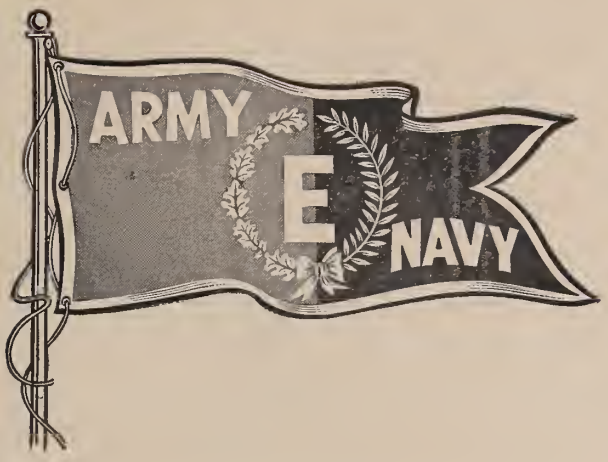
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KENTUCKY MEDICAL JOURNAL

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

VOL. 42, NO. 1 BOWLING GREEN, KY. JANUARY, 1943

AN URGENT REQUEST

"It is of the utmost importance that the Procurement and Assignment Service for Physicians, Dentists, and Veterinarians, immediately has the name of any doctor who really is willing to be dislocated for service, either in industry or in overpopulated areas, and who has not been declared essential to his present locality. This is necessary if the medical profession is to be able to meet these needs adequately and promptly. We urgently request that any physician over the age of 45 who wishes to participate in the war effort send in his name to the State Chairman for the Procurement and Assignment Service in his State."

Sincerely yours,
Frank H. Lahey,
Chairman, Directing Board

GREETINGS FROM THE PRESIDENT

Again we approach a milestone which represents the passing of another year, not just an ordinary year but a year that will go down in history as an outstanding year in events and accomplishments. First our country was challenged in the latter part of the preceding year and how we have met that challenge! Our country as a whole, our state and above all to us our profession has met that challenge. We all know how our country has met the challenge. It has met it with the most intensive effort of preparation and accomplishments that has ever been known in the civilized world. It has taken in its stride not only the effort to equip an enormous army and navy together with all branches of the armed service but it has undertaken to supply the means and materials for this great armed force and at the same time to largely help supply its allied nations.

The medical profession of the entire country including our own state has met this challenge also. Due to the great demand for members of the medical profession in the armed forces our doctors have been enlisted voluntarily in such great numbers that in some instances it has caused very severe drain on the necessary doctors for the civilian population, but the fact remains the profession met the challenge. Some of the committees in the medical profession have had long hours of strenuous work in undertaking to fairly and impartially procure the necessary doctors with the least possible dislocation of the essential doctors at home. This has been hard work for which the entire profession owes them a debt of gratitude. In the great part those who enlisted have done so cheerfully, courageously, patriotically and unselfishly.

For the years ahead we have before us more arduous work both in preparation for war and in our state-wide program to help our civilian population. The profession will take it in its stride and press forward with renewed effort to accomplish all that is possible, considering the limits and the hindrances of the circumstances.

With my firm trust and belief in the profession of our state and with the greetings of all the officers of the State Medical Association and with my sincere hopes for a happy and prosperous New Year, I remain,

Very sincerely,
E. M. Howard, President
Kentucky State Medical Association

GREETINGS FROM PRESIDENT ELECT

C. C. TURNER,
Glasgow

January came from Janus, an ancient heathen god with two faces, one looking backward, the other forward. Looking backward to the time when war struck the United States, just a little more than one year ago, it found the country largely unprepared, both physically and psychologically. Not so the medical profession. In June, 1940. recognizing the imminence of war, the Medical Association set up a Committee on Medical Preparedness which made a complete survey of the nation's medical man power. So when war came, this committee knew the exact number of doctors, their ages, locations, the institutions from which they graduated with dates, internships, post graduate work and

the type of work, whether general practice or one of the specialists. Therefore when the Procurement and Assignment announced Kentucky's quota for 1942, the response was both immediate and generous so that by October first the job was completed and the recruiting Committee withdrawn.

Charged as it was with the task of supplying its quota to the armed forces, the necessary medical care to the industrial workers and to the civilian population, the Procurement and Assignment Service was given a Herculean task, but performed it in a very fine way. There have been criticisms from certain quarters but that was expected. The program provided for 6.5 doctors for each one thousand armed men and an overall ration of one doctor for fifteen hundred civilian population. But as every body knows who's at all familiar with the situation, there are areas in Kentucky where there never were that many doctors and probably never will be. This war has brought into focus the problem which for a number of years has confronted not only Kentucky but the entire nation, that is, the unequal distribution of doctors. For example, as of October 1st, 1942, Jefferson County had one doctor for every eight hundred and eighty-seven persons, whereas Edmonson County, with a population of eleven thousand and five hundred, had only one doctor within its borders. If it were my purpose to prove the scarcity of doctors, I would stop right there. But, while that statement is correct, it does not give a true picture of the situation, for the reason that located near its border in other counties, are eight or ten doctors whose territories extend well into Edmonson County. Besides, no citizen is more than two hours from a well equipped hospital. However, that is not to say there are no areas having a scarcity of doctors, on the contrary, there are quite a number of localities where there is only one doctor to five thousand population. In most cases, that is due to the fact that the doctors formerly located there belonged to the Army Reserve Corps and were first to be called into active service. At its last annual meeting, in order to provide for such exigencies, the House of Delegates very wisely adopted a plan whereby, upon the request of the community, the United States Public Health Service may send doctors to these critical areas for the duration. According to Dr. Frank Lahey, already two hundred and eighteen doctors in fifty-four communities in twenty-five different states have thus been located. Strange to say, criticisms are not coming from the rural sections where they never had enough doctors or enough of anything else; rather they came from cities where there is a surplus of doctors. The same people who complain because their family doctors entered the service, also complain because sugar, coffee, gas and other things are rationed. There has been no complaint from the Army, Navy or Air Corps, they have cooperated fully and are well satisfied with the results. Everybody agrees that they must be served first; if there is not enough to go around, then medical service to civilians will have to be rationed. Taking it all in all, our doctors have a right to be proud of the past year's accomplishments and, generally speaking, the public likewise is satisfied.

No one can forecast what the future has in store for us. No doubt many hard years lie ahead. Whether with the armed forces on the far flung battle fronts or doing duty on the home front, we will be called upon to toil and sacrifice as we have never done before. May we as doctors, as leaders in our respective communities, accept our lot with patience and fortitude like the true soldiers and patriots that we are.

As President-Elect of the Kentucky State Medical Association, I extend the Seasons Greetings and wish for each of you health and a measure of happiness consistent with circumstances.

A CHALLENGE TO THE MEDICAL PROFESSION

It is perfectly evident that the United States has not only the most carefully selected and the best trained and educated medical profession in the world and that it has more of these well trained physicians in proporation to its population than any other nation. Since these things are true, why should we remain dumb and inert when our people find themselves naturally aroused by finding that more of our young men are being found physically and mentally unfit to fight than was the case in 1917 and '18? Shall we, by our silence and our failure to act in the presence of such a condition, lose the confidence that has been reposed in us and have the initiative taken away from us? In our perfectly natural desire to preserve the *status quo*, in which we find ourselves, as a rule, satisfied and able to take care of ourselves, is it advisable for us to remain static, or should we develop the constructive and thoughtful leadership that such a situation seems to demand? Much was said during and immediately after the first World War on the

necessity for a definite strategy to overcome and prevent and cure unnecessary illness that makes men and women ineffective as either citizens or soldiers, but we were lulled back to sleep in our efforts by the lush and illusory prosperity of the so-called "prosperous" '20s, and it is only in the last ten years that we have really started again to do something about it.

In the December issue of *The Military Surgeon*, Dr. Arthur P. Black, a civilian Reserve Officer who is serving with the Navy, presents the Wellcome Prize Essay on the subject. Measures of Preventive Medicine Recommended by the Federal Medical Services to Insure the Maximun Improvement of the Selectee of 1961 Over Him Of 1941. He says, "The problems of mental and physical defects in selectees for the United States Army have two main aspects, rehabilitation and prevention." He defines "Measures of preventive medicine," "to include all measures of the science, art, and practice of medicine, both preventive and restorative, which tend to mitigate or entirely prevent the development of those mental and physical qualities in the selectee which are amenable to such purposeful influences, and which development if unhindered would lead to disqualification of the selectee for general military duty." After recording that fifty per cent of the registrants between the ages of 21 and 36 who were examined prior to May 31, 1941 were found not to be qualified for general military service and that twenty-five per cent were considered unsuitable for any type of military service, recent downward alterations in the physical standards has reduced the percentage of rejectees but *not the percentage of defects*. Dr. Black quotes Will Rogers as once having said, "Collecting data is like collecting garbage. After you have it, you have to do something with it!"

"These data present a challenge to the American people, parents, public health workers, physicians, teachers, and the public: what can we do to reduce these defects to the very minimun in the rising generations?"

After discussing the quantitative and qualitative analyses of maior defects in considerable detail he quotes the motto of the Department of Health of the State of New York: "Within wide limits public health is purchasable." He might equally well have quoted that of Kentucky: "Public health is public wealth."

He further says, "The two sine qua non for any type of medical service are a physician and a patient. It must not be forgotten that medical care in final analysis is a personalized service of a skilled physician to his fellow man. It is not and never can be commodity to be bartered over the counter, and it is not amenable to mass production techniques or commercial methods of distribution. The only sound basis for better medical care is more and better physicians treating and advising with more intelligent and better informed patients, not alone in illness but also in health."

"It is now fair to ask whether the content and type of medical education common in the United States is adequate to present day needs. Just as there has been a change through the centuries from a simple to a complex organization of society, so through recent decades has there been a rapid metamorphosis of medical practice from the simple to the complex. Advances in scientific medicine and accession of many new special techniques have forced specialization upon us. The acquisition of all new medical knowledge was beyond the ability of any physician to attempt."

Of particular interest to the profession of Kentucky is the following paragraph:

"That the general practitioner or family physician is aware of the need for a changed viewpoint for both himself and his patient is attested by what he will tell you and by what he occasionally will write. Dunham writing of the "Experience and Impressions of a Rural Examining Physician" in the Journal of the Kentucky State Medical Association says that folks have no interest in their health but seek medical attention only when they are ill. But on the other hand he believes that the physician has not been the source of health education that he should have been. After examining a selectee he says, "In my thoughts I ask him, 'Who has neglected you, who has kept so much knowledge of modern medicine away from you? The only one who could have given it to you is your family physician. He has failed you. He did not have the time; he did not have the energy, and he did not have the knowledge'. I ask myself, 'Am I one who is distributing the knowledge of medicine or am I holding it back?' Somewhere in the set up of things someone has failed." Perhaps the real truth is not that someone has failed, but rather that the traditional interrelationship of a changing social pattern and an advancing medical science have been disturbed and complicated by the very forces of progress."

Also of special interest to Kentuckians, who will remember that the first full time health department was created in

Jefferson County in 1908, is the following paragraph:

" The introduction of full-time city, county, or district health units to all populations of 20,000 and over is to be recommended without qualification, for experience has shown it to be the most effective agent in correcting public health problems in communities. At a recent meeting of the American Medical Association a resolution was adopted by the House of Delegates urging 'the Trustees of the American Medical Association to obtain a complete coverage of the population and the area of the United States with full-time, trained health services at the earliest possible date.' He closes this important challenge with the following recommendations:

1. Establishment of complete coverage of the United States by full-time trained health services.
2. Encouragement of a change in viewpoint of physicians and medical teachers and in the curriculum of medical schools, in the direction of preventive medicine.
3. Maintenance of high standards of medical education as the most important single factor in better medical care and better public health service.
4. Continuance of experiments in methods of more adequately distributing medical care.
5. Promotion of the education of the public in matters of health.
6. Enlargement of the industrial hygiene program.
7. Intensification of venereal disease control.
8. Enlistment of the active interest of all physicians and dentists in the tremendous problems of prevention and early treatment of dental defects.
9. Dissemination and application of knowledge of nutrition.
10. Establishment of day nurseries and day schools to care for children whose mothers are employed.
11. Motivation of more medical students to enter the fields of pediatrics and pediatric psychiatry.
12. Extension of pediatric care of all children, and provision for the rehabilitation of early remedial defects."

It seems to us that this whole discussion may be summed up in the consideration of the question, Shall we, as a profession, continue to be responsive only to the demands of individuals for our service, or shall we so educate and rearrange and redistribute our profession and its facilities as to be responsive to the needs of the people for health and medical care?

SURGICAL KNOWLEDGE
SAGACITY—SIMPLICITY—TECHNIC

Advice To Young Surgeons: Know everything possible concerning the work you are about to undertake. This requires constant and painstaking effort, close application and association with every surgeon of ability within your reach. Such contacts bring many valuable points, which add to your knowledge, judgment, wisdom, discretion and ability to await events; thus allowing the natural forces of repair to aid in the improvement and recovery of the patient. A young man just out of Hospital asked to aid an older general practitioner perform a minor surgical procedure in the patient's home when several persons were present, received a most valuable lesson, when he remarked "Doctor, do you think it might be well for you to get a sharper pair of scissors?" The wise reply came "I do not know whether to do that or get an assistant who would be kind enough not to mention their dullness." A most valuable reply.

On another occasion a young surgeon called in to see a surgical patient, said, "this can be relieved" and gave a full description of the steps necessary. An older surgeon after examining the case said, "yes we can relieve this easily," and was asked to perform the operation. A definite tribute to his discretion.

There is a tendency on the part of many coming into contact with the sick to be impatient, to rush treatment, and develop a desire to do too much rather than depend on nature to do its share. Mature judgment shown by the master surgeon is often seen to work wonders at such times, and results frequently in remarkable restoration to health. So many men have a tendency to employ routine treatment rather than to meet special conditions, both in medical and surgical cases. Orders for 1000 cc of saline; glucose or even blood transfusion is so often heard as the patient leaves the operating room without the attendant's seeing him again and observing his condition before any orders are given. The normal powers of repair must never be underestimated.

The young surgeon who gains poise, discretion, and patience will obtain many patients and be wonderfully repaid during the years, by the satisfaction of work well done, and the affection and respect of his clientele.

Medicine is an Art and a Science, but the latter is not exact. Do not become too scientific and lose the Art of Surgery.

J. Garland Sherrill

ORIGINAL ARTICLES

VIRUS PNEUMONIA: TREATMENT WITH CONVALESCENT BLOOD

Morris Flexner, M. D.
AND
Max L. Garon, M. D.
Louisville

For some years we have recognized in this community, rare cases of pneumonia that did not conform to the usual pattern of pneumococcus pneumonia. Various organisms were recovered, low white counts predominated. The mortality rate was low, but the number of these cases encountered was too small to cause clinical excitement. Today the situation is different. Since June there has appeared in this community a mild epidemic of a type of pneumonia not seen previously. It is this experience in a group of 35 cases we wish to recount.

Age: The majority of our cases, as in the literature, are in young adults between the ages of 15 and 20 years. The youngest patient seen was 4½ years old and the oldest 76, both of whom recovered.

Onset: In practically all of the cases the onset was insidious, with at times a feeling of fatigue or malaise for as long as a week. The fever frequently was low but variable for the first day or two, often reaching 103 to 105 degrees. Chills as such seldom occurred, but chilly sensations were common. Headaches and drenching sweats were present in almost all the cases, the latter lasting for several days.

Cough: Cough was frequently rasping, irritating and paroxysmal, requiring sedatives. In 4 of our cases, asthmatic breathing developed after one week. Tracheal or retrosternal pain was an occasional complaint.

Sputum: Several of this group had no sputum at all. Others showed a moderate amount of mucoid or mucopurulent, and occasionally, blood streaked sputum. At times, on recovering, expectoration became copious. Cultures of this material yielded, on several occasions, a few hemolytic, more often non-hemolytic streptococci; occasionally staphylococci and micrococcus catarrhalis, the usual inhabitants of the upper respiratory tract.

General Appearance: In contrast to pneumococcus pneumonia, at the onset these patients do not appear ill. Undoubtedly many of them are ambulatory, when an x-ray might show early pulmonary involvement. The milder cases may never appear ill, while the more severe may show cyanosis and dyspnea. One case had that greyish blue toxic appearance, associated with severe influenzal pneumonia. Dilatation of the alae nasae is rare, but we have seen it in two cases. Herpes has not appeared in our group, but may occur. Abdominal distention occurred only in the severe, more toxic cases.

Physical Findings: In the chest, at the onset, physical findings may be entirely absent. In others, over the area that is involved, high pitched breath sound, with an occasional fine moist rale may be heard at the end of inspiration. There is no change on percussion early. In fact, in only the very severe cases there may be slight impairment. After three to five days, the rales that we feel to be characteristic of this disease appear. They persist frequently long after the temperature is normal and the patient seems well, although the x-ray may still show evidence of disease "Sticky" probably describes the rales best. They are fine to medium and heard throughout inspiration. Bronchial breathing with bronchophony is unusual, but may occur in the very ill. Pleural effusions are described but we have seen none. An enlarged spleen has been found in seven cases.

Fever: The word "hectic" is an apt term to describe this fever. Wide fluctuations with chilly sensations occurred often. Temperatures of 104 to 105 degrees were not uncommon, while the milder cases ran from normal to 100 degrees, occasionally going to 102, then quickly receding. At times the highest fever of the day was in the morning.

Laboratory Data: A striking diagnostic finding was the low white count. Usually the total count was between 6000 and 8000, with a few instances below 6000 on admission. At times, the count went to 10,000 or 12,000, but rarely. Such counts, late in the disease, point to possible secondary invasion which may respond to sulfonamide therapy, but this is a rare finding. The differential counts were not striking. The urinary findings were unimportant.

X-Ray Findings: The most characteristic findings occur here. Early the lesions appear as a localized haziness, often at the hilum, then extending peripherally as a soft cottony density; later becoming a definite opacity, seldom as dense as a lobar pneumonia. At times, the disease may spread with small patchy lesions affecting

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one of several lobes. The persistence of x-ray findings, long after clinical improvement has occurred, is one of the characteristics of this infection.

INCUBATION PERIOD The average incubation period is from two to two and one-half weeks, the outside figures being from one to three weeks.

TABLE 1

DIFFERENTIATING CRITERIA IN THREE TYPES OF PNEUMONIA

(Modified from Goodrich & Bradford)

	Pneumococcus	Virus Type	Influenza
Incubation	1-2 days	2-3 weeks	1-4 days
Onset	abrupt	insidious	abrupt
Chill	at onset	chilly	repeated
Cough	loose	dry	loose
Sputum	rusty	none	bloody
Dilatation alae nasae	positive	usually absent	positive
Dyspnea	positive	absent	variable
Fever	maintained	hectic	remittent
Percussion note	impaired	rarely impaired	variable
Tubular breathing	present	absent	infrequent
Rales	variable	sticky at end of inspiration	fine crackles

HISTORY: That this is not a new disease is substantiated by early reports. Bowen in 1935 reported his experiences in Hawaii in the years 1932 and 1933. Allen from Fort Sam Houston in 1936 reported a series of cases, even suggesting that the disease might be virus in origin. Then appeared a number of reports from our eastern seaboard: Gallagher at Andover, Reiman of Philadelphia, Longcope of Baltimore, etc. Longcope's report of his 38 cases, collected over a period of a year, was made only two years ago. Since then cases have been reported from practically all sections of the globe. It is of interest that it has taken such a long time to attain its present proportions and to reach this section of the country. Possibly the mass movement of troops can explain this.

TERMINOLOGY: Many names have been suggested. The following is a a list of the more prominent ones: Virus Pneumonia; Atypical Pneumonia; Broncho-Pneumonia, Variety X; Acute Pneumonitis; Acute Interstitial Pneumonia; Acute Diffuse Bronchiolitis; Disseminated Focal Pneumonia; Primary Atypical Pneumonia, Etiology Unknown.

CONTAGION: We feel, as do many others, that this is a disease requiring careful handling. Masks in the early coughing period might suffice, as transmission is probably by droplet infection. We have seen as many as four cases in the same family. At other times, members of the same household with cough and mild fever, not ill enough for hospitalization, suggested the same infection.

ETIOLOGY: That this disease is not caused by any of the ordinary bacteria has been proven by careful studies of the sputum and post mortem cultures. Clinically it is a very different picture from influenza, and from the x-ray standpoint, there is no resemblance. Psittacosis undoubtedly simulates it in many ways. There is also a group of psittacosis-like viruses isolated from ordinary barnyard fowls that have proven to be infectious for man. Of extreme interest is the fact that psittacosis has been found among the pigeons and doves in the parks in New York City. Rivers has shown that sputum from cases of psittacosis may be injected into white mice intraperitoneally and the virus recovered. The virus of psittacosis itself only passes the coarser bacterial filters, and because morphologically it bears some resemblance to the rickettsia, by some it has been regarded as a transition between the two groups. Dyer, Toffney and Bengstan described in 1940 a laboratory epidemic of 15 cases in employees at the National Institute of Health. Clinically, the cases sound like those we are seeing today. However, in three cases they were able to isolate definite rickettsia, which in guinea pigs produced a disease resembling American "Q" fever. Cross immunity tests proved positive with strains of American "Q" fever previously isolated, and to a strain of Australian "Q" fever. These strains passed through a Berkefeld filter which held back the Rickettsia of Rocky Mountain fever.

One of the most significant articles on the etiology of the disease is by Weir and Horsfall. Using throat washings from pa-

tients with virus pneumonia they were unable to inoculate successfully any of the ordinary laboratory animals and many not usually used. They were successful only with the Jamaica mongoose in which they could produce pulmonary lesions in a high percentage of inoculations. They were able also to transmit the disease from one mongoose to another by contact. The virus was definitely filterable, was able to withstand storage in glycerine and freezing, and drying in vacuum. Cultivation was made on the chorio-allantoic membrane of the chick embryo successfully. Neutralization of the virus could be obtained by using convalescent mongoose serum, while none was obtained from using ordinary mongoose serum. Serum from patients convalescent from the disease in a few cases seemed to show definite neutralization properties; those in the acute phase of the disease failed to do so. Using influenza convalescent ferret's serum, no neutralization of this virus occurred.

Stickney and Heilman, at the Mayo Clinic, isolated from a farmer in close contact with fowls and pigeons a virus closely resembling that of psittacosis. It could only be obtained in mice by intranasal or intracerebral injections, but not by intraperitoneal injection. In this respect, it differed from true psittacosis. However, one month after recovery the patient's serum gave a strongly positive complement fixation test to psittacosis antigen. Clinically, the disease belonged in the group we are discussing.

Eaton, Beck and Pearson in California in March 1940 studied 6 cases. By intranasal inoculation of mice, they were able to reproduce the disease when intraperitoneal inoculation failed. They showed the virus was related to those of meningo-pneumonitis and psittocosis by complement fixation tests and by active immunity tests in mice.

There we let the matter rest. Undoubtedly, there is a large group of viruses or virus-like bodies capable of producing atypical pneumonia in man. It is possible that the same clinical picture may be repeated many times over the world by different strains of related viruses. On the whole, the studies of Weir and Horsfall seem to fit into the general picture best.

Therapy

Because of the insidious mode of attack, the question of therapy of this disease is puzzling. Were every patient seen with low grade fever and evidence of slight respiratory infection subjected to a leucocytic count and x-ray study at once, the problem would be simpler. In an army camp in the midst of an epidemic this could be done and undoubtedly a great many cases could be isolated early. In private practice, with the patient ill at home, this is not feasible. There are usually no physical signs of the disease for three or four days after symptoms appear. The question that confronts the clinician is: Should any of the sulfonamides be used or not? If the disease is not virus in origin, the use of one of these agents might abort the infection or shorten its course. On the other hand, we believe that these drugs are of no value in virus pneumonia and possibly may make the picture more confused and the patient feel worse. We have not seen serious leucopenias from their use here. Only a few occasions, the fever has become more "hectic," possibly a manifestation of drug idiosyncrasy. We, therefore, believe it is probably better to try sulfadiazine for 36 to 48 hours if blood count or x-ray are not available, and then if there is no apparent benefit, to stop its use.

We do believe, however, that there is some benefit, at times dramatic, in the use of a transfusion of either whole blood or plasma from a convalescent donor. We have reserved its use only for the very ill, and believe we have definitely reversed the trend and shortened the convalescence of the illness in seven cases. In the two fatal cases in which it was used, in one a boy with tremendous involvement, ill ten days, no benefit was seen from 125 cc of plasma. In an adult 52, a transfusion from a convalescent donor produced no results. This man had had an associated asthmatic condition, a bad heart and marked anemia. Following a second ordinary transfusion, he became anuric and died in uremia. His pneumonic condition had improved greatly. At autopsy one kidney was small and degenerated, the other was seriously involved and the heart muscle showed marked fragmentation. There was little pneumonia remaining.

The neutralizing effect of convalescent serum was shown by Weir and Horsfall in their experiments with the mongoose, so this therapy has some experimental basis. We do not know definitely how small an injection of plasma might be efficacious.

There is also the thought that small injections of convalescent serum or plasma might act prophylactically in much the same way that measles convalescent serum was used, or whole blood injection to prevent poliomyelitis. We have used it early in only one case, that is on the third day, even then, x-ray showed involvement of the entire left upper lobe with definite

bronchial breathing at the apex. The temperature which was between 102 and 103 for the first 48 hours, dropped to normal in 24 hours. There were minor elevations on the following two days and then the temperature became normal. The physical signs were still pronounced, but cleared quicker than we had been lead to expect from previous cases with involvement of similiar extent.

In the absence of specific donors, blood transfusions from adults may prove beneficial. We have used them in only a few of our cases that showed definite anemia. The possibility suggests itself that adult blood contains antibodies acquired over a period of time and, that in an emergency, pooled adult plasma may prove helpful.

For the relief of cough, codeine has been the drug of choice. Aspirin, alone or in combination, was given for fever or mild aching. Iodides in some form have been used as an expectorant. Fluids have been pushed and elimination maintained. Oxygen was ordered for cyanosis and hyperpnea.

Pathology: The pathology of the disease will not be dealt with in detail. In one of the two cases autopsied, no growth could be obtained by aerobic or anaerobic cultures from an area of hepatization in the lung. This agrees with several cases reported. The pneumonic area on section showed a round cell infiltration with few polymorphonuclear cells in evidence.

Case Summaries: The following cases are briefly reported:

Stuart C. Age 18. Patient was admitted to hospital on June 26th, 1942. He had had fever, a dry cough and terrific sweats for three days before admission. There had been no physical findings. His WBC varied from 6000 to 8000. Sputum examination showed some staphylococci, non hemolytic streptococci. He was treated symptomatically. His temperature was up for eleven days, varying between normal and 104. Physical findings developed about two days before temperature became normal and consisted of impaired percussion note and sticky rales. Sulfadiazine before admission to hospital was ineffective. Plasma not used.

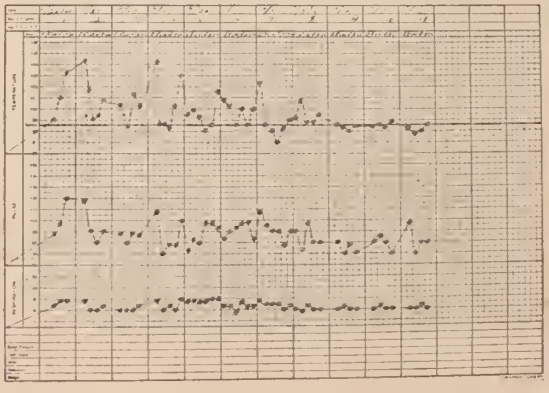


Figure 1
Temperature Chart
Stuart C



Figure 2
Stuart C, X-Ray Chest
June 26, 1942



Figure 3
Stuart C, X-Ray Chest
June 29, 1942



Figure 4
Stuart C, X-Ray Chest
July 10, 1942

William A. McM. Age 18. Admitted to hospital July 7th, 1942. Had been ill with temperature and dry cough for two days. WBC varied between 6,900 and 9,800 and polys 75 to 85%. Sputum showed no pneumococci but staphylococcus albus and several varieties of streptococci, largely non-hemolytic. Sulfadiazine for 48 hours was not effective. Plasma on fifth hospital day, seventh day of illness. Two days later was bronchoscoped because of evidence of localized bronchial obstruction. A small amount of muco-purulent material was aspirated. Temperature normal 48 hours after plasma. Uneventful recovery.

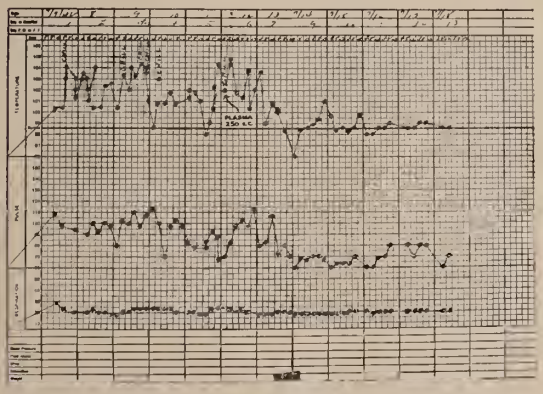


Figure 5
Wm. A. McM. - Temperature Chart

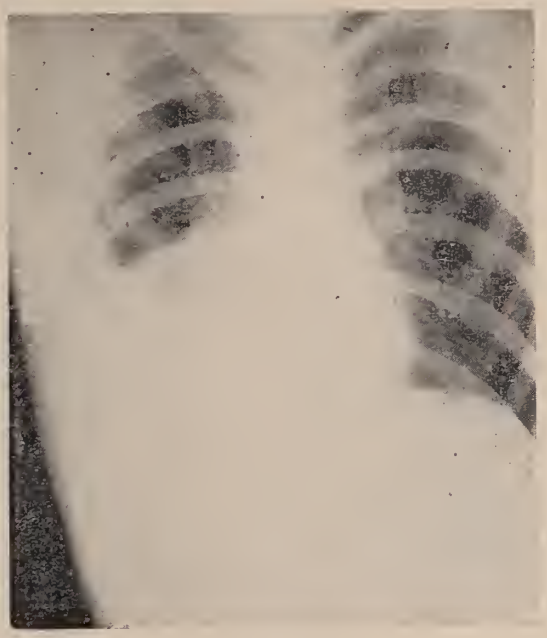


Figure 6
Wm. A. McM. - X-Ray Chest
July 10, 1942

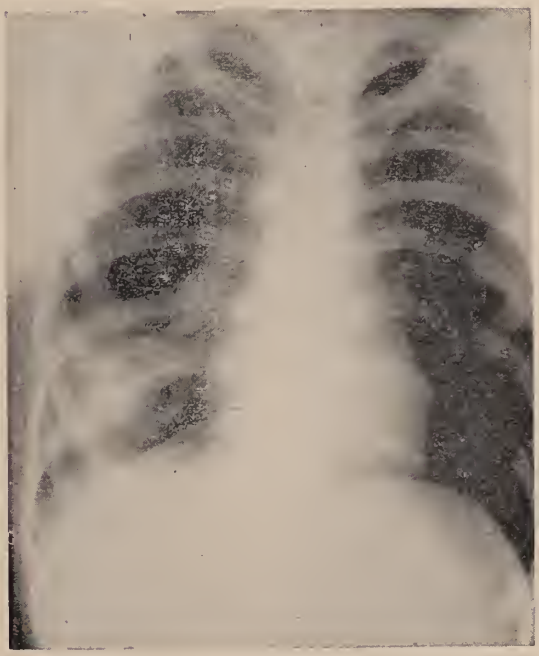


Figure 7
July 14. 1942
Wm. A. McM. - X-Ray Chest

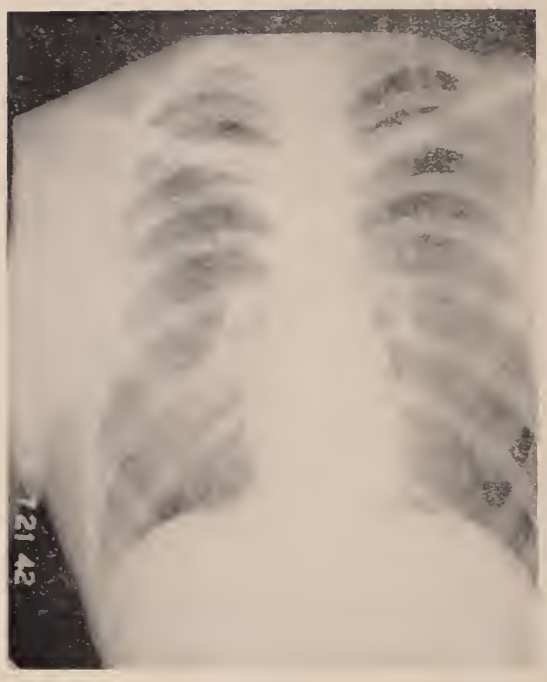


Figure 8
Wm. A. McM. - X-Ray Chest
July 21, 1942

Peggy C. Age 19. Became ill on July 13th, 1942 with temperature of 101 and a dry, non - productive cough. Patient's mother did not permit admission to hospital until 9 days later. Temperature varied from 101 to 105 before admission. On physical examination nothing was found except occasional fine rales in the right lower lobe posteriorly. The patient appeared critically ill for at least three days immediately before admission. She complained of feeling terribly and wept frequently. For two days preceding hospitalization and until the fall in temperature,

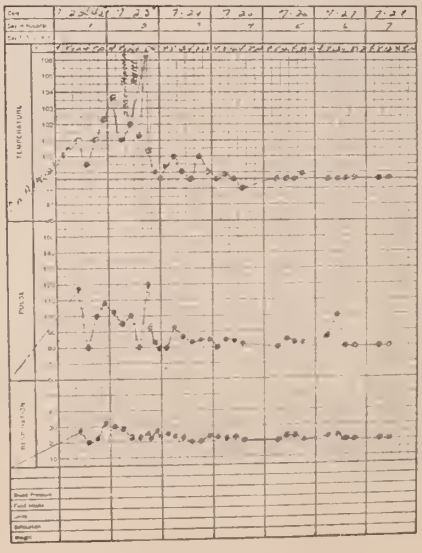


Figure 9
Peggy C - Temperature Chart

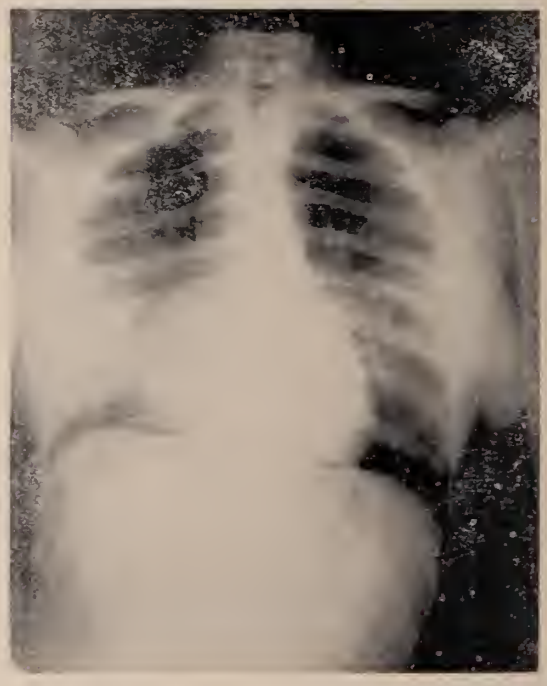


Figure 10
Peggy C - X-Ray Chest
July 22, 1942



Figure 11
Peggy C - X-Ray Chest
July 25, 1942

she showed grey, dusky cyanosis similar to that seen in toxic influenzal pneumonia. 250 cc of plasma given on second hospital day. Temperature normal after 24 hours. Following the temperature drop, cough became productive and physical findings included sticky, moist rales in both bases. WBC at home and at hospital varied between 7,000 and 9,000. Sputum examination showed a staphylococcus albus, streptococcus viridans and hemolytic streptococci. Recovery following plasma was dramatic.

Billy H. Age 12. This case reported through courtesy of Dr. M. G. Buckles. Was admitted to hospital on July 25th, 1942 after a week of treatment elsewhere. He had been on large doses of sulfathiazole three days before admission. The temperature varied from 100 to 103 and on three occasions went up to 105 and 106. A culture was made from a throat swab and pure hemolytic strep was grown. Sputum was never obtained. WBC on admission was 9,950 and two days later 8,850. Two days before death the WBC varied from 21,000 to 24,000. Sulfadiazine and sulfanilamide were also used in treatment. 100cc of convalescent plasma was given intravenously on fourth hospital day. A violent reaction with temperature of 106 followed. This patient was critically ill with high fever, high pulse rate and marked hyperpnea. He died one week after admission.



Figure 12
Billy H - X-Ray Chest
July 29, 1942

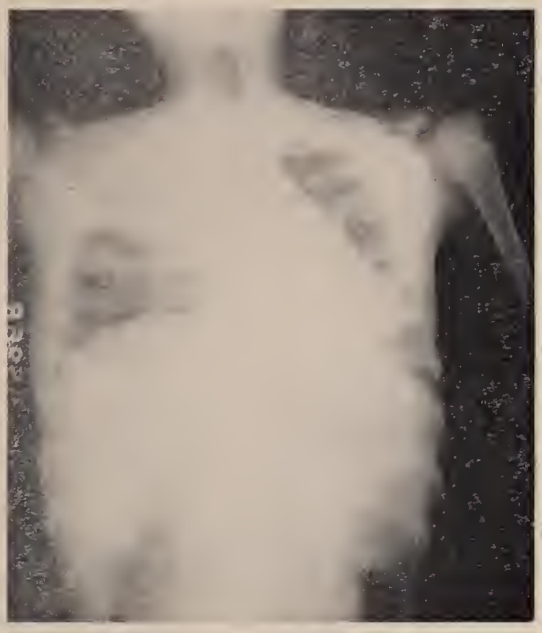


Figure 13
Billy H - X-Ray Chest
July 30, 1942

Autopsy was performed. Pathological report: Grossly, large areas of consolidation of both lungs were found. Microscopic examination showed the characteristic findings of this disease, mononuclear infiltration. Both aerobic and anaerobic cultures from areas of hepatization were sterile.

Bobby M. Age 5. Through courtesy of Dr. W. W. Nicholson. This child was ill for a week before admission with fever

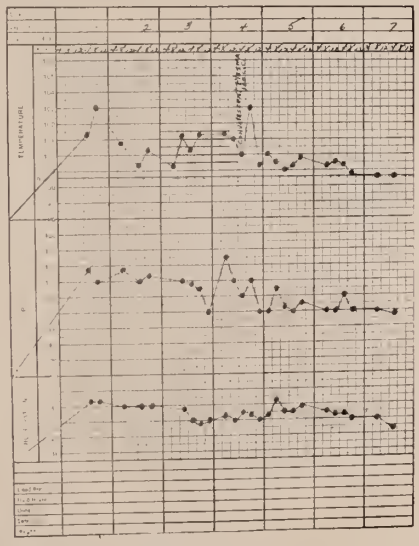


Figure 14
Bobby M - Temperature Chart

and cough. He was critically ill in an oxygen tent with asthmatic breathing and marked dilatation of alae nasae. No response to usual therapy.WBC was low normal. Dramatic response to 100 cc plasma.

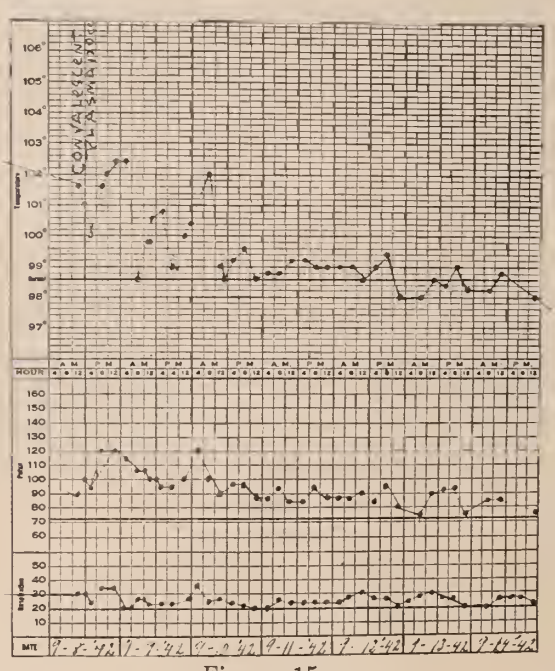


Figure 15

Anne F. (case not reported) Temperature range 99° - 103°, chills, sweats, consolidation, left upper lobe, W. B. C. 6,200

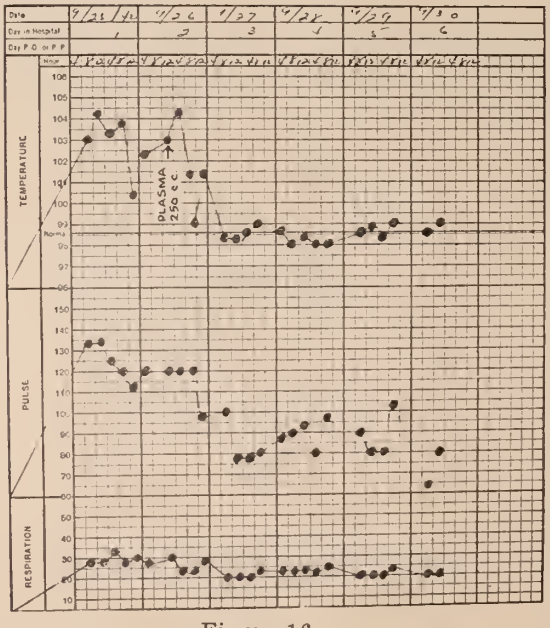


Figure 16

Dick C - Temperature chart (case not reported). Age 9, consolidation, left upper lobe, high fever, chills, sweats for 3 days before admission. W. B. C. 14,400, later 11,000.

Conclusions

1. We feel that atypical pneumonia, of probable virus origin, is a clinical entity.
2. The striking clinical features are:
 (a) Irritating non-productive cough at onset.
 (b) Headache
 (c) Irregular high fever
 (d) Drenching sweats
 (e) Paucity of physical signs in contrast to x-ray findings.
 (f) Leucocyte count normal to low.
3. We believe that whole blood or plasma from convalescent donors has proven an effective therapeutic agent in this disease. The response seems to be specific, rather than a non-specific one.

(Bibliography available on request.)

DISCUSSION

Capt. James C. Drye, M. C., Fort Knox: During the last year at Fort Knox we have had 291 cases of pneumonia, or rather 291 cases with x-ray evidence of pneumonia; there is a difference. Of this number, there were 110 lobar pneumonias, 39 secondary bronchopneumonias, 3 cases of streptococcic pneumonia with empyema, and 21 cases of rather severe atypical bronchopneumonia, 60 cases with x-ray findings of pneumonia but which clinically could not be called pneumonia.

There were about 58 cases which could not be classified on an analysis of the charts because of inadequate laboratory workup and clinical workup. There was one death in the entire series of 291 cases. This was a case of streptococcic pneumonia with empyema, the patient dying within 24 hours after admission.

As you know, in the Army a soldier is either able to do full duty or is in the hospital. As a result of this, we get the patients extremely early, at the onset of the illness or the day following. These patients come in about the third day, for some reason or other. In the Army there is no financial consideration as to the amount of laboratory workup, and these patients have repeated x-rays, repeated blood counts, blood cultures and sputum examinations, and are followed very closely.

Our 21 cases of severe primary atypical bronchopneumonia or virus pneumonia resemble closely the severe cases presented by Dr. Flexner, with some minor differences. The chilly sensations were extremely common, but severe shaking chills were seen on two of three occasions. The cough was extremely dry, severe and paroxysmal, and one of the most troublesome symptoms we had to deal with. As in Dr. Flexner's patients, the substernal and tracheal pain was common, and the other chest complaints were a sensation of tightness and aching in the

chest. Pleuritic pain was seen only once. Cyanosis was present in all of our cases and was accompanied by rather extreme dyspnea. Flaring of the alae nasi was not seen.

Three of our cases presented the grayish blue cyanosis associated with influenza as referred to by Dr. Flexner. In these cases the cyanosis remained from three to six days after normal temperature. These men all coughed up copious amounts of dark red blood, and I am not sure that they belong in this series.

The blood counts were the most interesting things in the entire picture. The initial counts ranged downward from normal to about 4500, and contrary to Dr. Flexner's experience, a lymphocytosis running as high as 50 per cent wasn't uncommon. Two or three days before the temperature began to drop by lysis the counts began to rise, and reached a peak two or three days after the temperature became normal. In our experience, this has been a favorable prognostic sign and is not looked on as evidence of secondary infection of some sort. We had no complications in any of the cases.

As to the contagiousness of the disease, until the last month we had not been impressed much with it. The personnel on my ward worked all winter and none of us contracted the disease, although we were around a lot of it. Since then three of our ward surgeons have come down with it in approximately two weeks.

As to therapy I am in complete agreement with Dr. Flexner that the sulfonamides are of no value. However, it has been our practice to put these patients on full doses of sulfathiazole for 24 hours or so until the diagnosis was firmly established. These cases can be confused with early lobar pneumonia, and we do not want to run the risk of withholding the drug until we are sure of our diagnosis. Oxygen is one of the biggest helps. We have used it on all of the 21 cases that were serious, and it seems to alleviate the cyanosis and quiet the patient. Codeine is given frequently and in large doses for relief of the cough. These soldiers require large doses. I have given as much as a grain of codeine every two hours.

We have not had much experience with convalescent plasma or convalescent whole blood, but we intend to try it and believe it may be of value.

The biggest problem we have as far as diagnosis goes is in the group of 60 cases which by x-ray have pneumonia and clinically resemble either an ordinary upper respiratory infection or a mild form of primary atypical bronchopneumonia, this virus pneumonia. Thirty of these cases were selected for close study on the basis of more adequate clinical workup. For this group as a whole the average temperature attained was 101.6. The average febrile period was six days. None of these patients showed dyspnea or cyanosis and did not appear to be particularly sick. In other words, these patients had an x-ray pneumonia and a clinical upper respiratory infection. They walk on the wards; it is hard to keep them in bed. Most of them on admission we thought had ordinary nasopharyngitis. However, this group of cases can be divided into two classes. One group,16 in number, resembled the primary atypical bronchopneumonia group in that there was no leukocyte response. Blood counts taken the day of admission or the next day averaged 7,400, while the temperature for that same day averaged 102. They were admitted on about the fourth day of illness and remained febrile for an average of about five days. They showed the typical dry cough, general malaise, headache, as the atypical pneumonias did, but they were very mildly ill. A good number of them ran a temperature no more than for the day of admission, in spite of rather striking x-ray pictures.

The other cases of this group, 14 in number, could not be told clinically from an ordinary acute bronchitis. They started with an ordinary head cold, running nose, sore throat, productive cough, and they were admitted about the third day and were febrile for about five days. Initial counts averaged 11,200, as contrasted to the 7,400 in the other group, while the temperature for the same day averaged 101. Frequently there was increase in the poly count.

Taking the last 30 cases as a whole I do not believe that they should be called pneumonia. I believe that pneumonia is a definite clinical entity and not an x-ray picture. I wonder how many patients in private practice if x-rayed every time they had a cold would show some transient infiltrates in the lung. In private practice many of these patients would not see a doctor, and much less be x-rayed.

I believe that in the 16 cases resembling primary atypical bronchopneumonia, that organism has primarily attacked the bronchi, and that in the other group which resembled the ordinary bronchitis case, the infection has spread a little beyond the terminal bronchioles into the lung parenchyma.

For this last group of light bronchitis cases I propose the term non-specific broncho-alveolitis, because that is what it is; it is not a clinical pneumonia.

Be that as it may, I would like to stress that these mild cases should not be confused with primary atypical bronchopneumonia. As does lobar pneumonia and secondary bronchopneumonia, primary atypical bronchopneumonia has a definite clearcut clinical picture. All that glitters on an x-ray plate is not pneumonia, nor is it this new primary atypical bronchopneumonia.

Morris Flexner, (in closing): There are two or three additional points not stressed in the paper

which I would like to emphasize.

The white blood cells frequently, after injection of convalescent plasma, rose from 6,000 to 8,000 or 9,000. A similar response has been seen on recovery. This suggests that possibly the virus of this disease has had some inhibitory action on the bone marrow. Rivers, in his paper on "Immunity in Virus Diseases," has stated that in virus diseases all cells that are to be involved are already attacked before clinical symptoms become manifest and hence cannot be reached by serum, the virus being enclosed in the cells. If this be true, it is somewhat difficult to explain the action of convalescent plasma on the basis of specific therapy; however, the character of the response, and prompt clinical improvement, make us believe that the treatment is specific.

REPORT OF A CASE OF RUPTURED INTERVERTEBRAL DISC FOLLOWING CHIROPRACTIC MANIPULATION

E. D. Fisher,
Murray

Case Report: A search of the literature reveals nothing of this kind.

A white divorced female of thirty two years, who was a bakery employee when able to work, came to us on May 6, 1939.

She complained of low back pain off and on for about fifteen years. The lumbar vertebrae were tender with periods of pain. This pain would radiate from the lumbar spine into the buttocks. First the right only was involved then the left. Until quite recently the pain radiated down the thighs and at times into the calves.

Four years ago she had abdominal surgery at which time her gall bladder and appendix were removed. For a few months she was entirely free from pain.

The attack of pain would appear suddenly without warning, last a few hours to days then disappear suddenly, apparently without cause. Between attacks she was quite comfortable.

During the month previous to entry into the hospital her suffering was so intense that she remained in bed most of the time. It seemed that her left leg was getting weaker and would not support her body.

On the day previous to admission she was given an adjustment to her lower spine by a chiropractor. The next day she developed a saddle shaped area over the buttocks which was completely anesthetic. Also she was unable to void and had to be catheterized. Simultaneously she lost control of the sphincter muscles of the anus and had no control of her bowels.

She states that when the pain was most severe the muscles of her gluteal region were spastic.

Past history and physical examination were not significant aside from the neurological findings and the soreness over the local area. In the motor system there was found some weakness in the left leg. In the sensory findings there was an area of impaired general sensation of a saddle-like distribution in the buttocks and an area of greatly impaired sense of touch, pressure, pain and temperature, located on the dorsal aspect of the right thigh. This area extended about one third of the way to the knee. Significant reflexes, patellar on right gave a four plus reaction. The patellar on the left, three plus, both Tendo-Achilles were absent.

Laboratory findings were not significant.

On March 14, 1939 X-Ray examination of the Sacralcoccygeal area showed some deformity of the 5th lumbar vertebra which was believed to be congenital. May 3, 1939 X-Ray of the back reveals complete absence of the intervertebral disc in this area.

The diagnosis was a herniated nucleus pulposus and was referred to a neurosurgeon for treatment. At operation a herniated fibrocartilage (5th lumbar) was removed. Post operative diagnosis was almost complete rupture of the 5th lumbar disc with pressure on cauda equina.

Following surgery there was almost immediate relief of pain and gradual relief of bladder and rectal symptoms. At two weeks relief was almost complete.

Dr. Francis Murphy who performed the operation states that in his judgment there was a small herniation of the nucleus which was made complete by the chiropractic maneuver.

Summary: A case has been presented which is of special interest because of the etiological precipitating factor, a chiropractic adjustment. The large herniation of the intervertebral disc produced classical symptoms of a cauda equina tumor. This rupture was demonstrated at operation and removed. The result was almost complete return to normal.

Read before the Calloway County Medical Society, April 9, 1942.

Tuberculosis already appears on the increase in the warring nations in the second world conflict. No single cause is apparent. Malnutrition is known to be serious in certain countries.

A RURAL LYING-IN HOSPITAL

HENRY HOLLIS CAFFEE, M. D.
Director Oneida Maternity Hospital
Oneida

Nobody denies the value of good obstetrical care for all mothers, and the only question open to dispute is how it may best be provided. The rural lying-in hospital now to be described represents one solution to the problem for a particular group of women who have heretofore had relatively little attention.

Taking first of all one of the less important considerations, in the choice of a type of obstetrical care, namely public demand, the trend for many years has been toward hospital delivery, until now wherever hospital facilities are ample home delivery is the exception rather than the rule. This is only natural, because of the greater comfort and convenience possible if for no other reason, and is true in the country as well as in the city. Few women who have borne a child in a good hospital ever prefer home delivery later.

Comparing physical effects upon the patients of the two main types of care, we find one important point in favor of home delivery: on services where only normal patients are delivered at home, as in the out-patient departments of the teaching hospitals, the incidence of fever in the puerperium is much lower than in the in-patient services of the best of hospitals. Possibly if the incidence of severe infections were taken instead of the incidence of fever and cases that would not have been considered suitable for home delivery were eliminated from the hospital series, the comparison would not favor the home so much. In one small series of private patients, all handled with the utmost conservatism by the same doctor, 15% of those delivered at home as compared with 8% of those delivered in the hospital had fever in the puerperium. This was thought to be due to the custom of that place, where relatives and friends from 300 miles around flocked to see the new baby and pay their respects to the mother, a custom affecting only those delivered at home, since only the immediate family were allowed to visit maternity patients in the local hospital for the first five days. In other respects, most notably the handling of unforeseen abnormalities, the relief of pain, and the prevention of injury to the pelvic floor, nobody denies that the hospital is superior. While it is true that over nine-tenths of all mothers have no serious abnormality, it is never certain that a given patient will escape trouble that could not be effectively dealt with at home, and while it is true that millions of women for thousands of years have gone without relief of pain, it is neither humane nor reasonable to ask our women to do so. As for conservation of the pelvic floor, the appalling number of gynecological cripples found in a region where all deliveries have been home deliveries would convince anybody of the need for the repair of all lacerations and the use of episiotomy when indicated, both of them procedures hard to do properly in the home.

The crux of the matter, though, in these days when so few of us have so big a job of medical care to do is how to do the greatest possible amount of good work with the smallest possible number of trained personnel. There is no slightest doubt that one obstetrician who can manage six deliveries in a single night in a hospital would do very well to handle two outside, even if they were in the same small town aside from the undisputed fact that the skilled obstetrician is not content to work under makeshift home-delivery conditions anyway. Proper home care in the puerperium is time-consuming, and if one is really busy simply cannot be done. To be sure, it is pleasant to drive about the countryside on a round of post-partum calls, but the amount of time, tires and motor-fuel in proportion to the number of patients seen is huge, and while this goes on the doctor cannot be reached in case of emergency.

For these reasons we contend that a special hospital maternity service or a special maternity hospital is the best way to render obstetrical care. Care of the newborn properly comes under the same unit, and certain gynecological problems related to obstetrics, for example abortion and ectopic pregnancy, may be taken care of there. It may even be wise to include some other aspects of gynecology, because the training and interests of the obstetrician, who is or should be a competent gynecologist, fit him for their management. Such a service is already provided in most of our cities by the maternity sections of general hospitals and the best of all by the great and justly famous lying-in hospitals. The next step is to bring the same service to the small towns and the country.

A lying-in hospital should be devoted to the care of mothers and their newborn babies and should not be asked to perform

Read before the Kentucky State Medical Association, Louisville, September 28-October 1, 1942.

unrelated services. General medical and surgical diseases, and infectious diseases in particular, except when they have direct bearing on motherhood, or pediatric except in the newborn, ought never to be allowed to intrude. The lying-in hospital should not attempt to set itself up as a general hospital any more than the obstetrician should attempt to set himself up as a general practitioner, for neither is prepared to keep high standards of work outside a very sharply limited though broad field. Within that field they should so far as is humanly possible be prepared for whatever comes. The rural lying-in hospital, to justify its existence as a more efficient means of providing obstetrical care than its predecessors have been, must also do so with a relatively small staff and relatively simple equipment. The service should be complete, that is, it should be set up to handle all aspects of maternal care in the region it serves. Private and semi-private as well as ward patients should be provided for and wherever it is customary there should be separate (but equivalent) facilities for white and colored women. There should be a well-developed system of prenatal and postnatal care, and finally there should be arrangements whereby extraordinary complications beyond the scope of the hospital can be readily and rapidly referred to larger institutions.

The size of the territory to be served by the hospital will vary with the means of transportation more than anything else, with two hours' easy travelling-distance about the limit. In the hills, a rough country with few highways, at a time when tires are few and poor, we find thirty miles the practical limit, but with travel as it was in Florida before the war, for instance, when it was easy to make an average speed of forty miles an hour from anywhere to anywhere else, a sixty to seventy-five mile radius would not be excessive. The area served could also be increased by the establishment of a hotel near by where normal mothers could spend the last few days before confinement, a boarding-house service that the hospital ought not to be expected to perform. The hospital should adapt its size to the number of patients who can reach it, rather than attempt to restrict the size of the area it serves to fit its facilities. Where transportation is good, the number cared for with a given bed-capacity can be appreciably increased, sometimes even doubled, by sending suitable patients home by ambulance after a short stay. In turn, the size of the medical staff must be apportioned to the number of cases handled per year, while on the other hand the size of the nursing staff is in proportion to the number of beds and bassinettes in the building.

As we are trying to develop it at Oneida, the rural lying-in hospital is a simplified miniature of its urban ancestors, with out-patient and in-patient departments, wards, semi-private rooms, labor and delivery rooms, nursery, isolation and gynecology sections all represented. We accept all maternity patients who apply to us if referred by a Doctor of Medicine or by a recognized agency such as the Frontier Nursing Service, and licensed Doctors of Medicine are welcome to deliver their private patients there, keeping to standards set by the attending obstetrician and with consultation and assistance available at no extra charge. Fees are so arranged that the patient pays no more for hospital delivery than she would have paid had she been delivered at home. Ward patients are usually referred by the county health officer; they are all asked to pay a nominal charge of a dollar a day, but none is refused admission because of inability to pay this. Prenatal clinics are held at the hospital and at the health-department offices of this and a neighboring county, patients being accepted for prenatal care at any time in pregnancy, and many private as well as ward patients being given prenatal care in this way. Six-week and six-month follow up examinations are also done in these clinics. There is no home-delivery service at present, nor do we ever intend to have an extensive one, but we are soon to have a nurse-midwife who will supervise and assist some of the more intelligent local "grannywomen" in a few instances where home delivery is preferred and is suitable or where transportation to the hospital is impossible. This nurse will also make case-finding, prenatal and follow-up calls in the area near the hospital. The attending obstetrician is available at all times for consultation by recognized doctors anywhere within reasonable travelling distance. Except in abnormal cases, women to be delivered in the hospital remain at home or visit relatives near by or stay at boarding-houses in the neighborhood until the onset of labor. The standard hospital stay is ten days after delivery, which could be shortened if the roads were better and the women lived in good houses, but represents the safe minimum where the typical mother comes from a shack "six mile up a dark holler."

Ideally a hospital of this kind ought to

be housed in a specially-designed building, which should be a one-story, rambling structure needing no elevator,in which the departments can be readily kept apart, the delivery suite with its noises, the isolation unit, the colored section if in a region where the color line is drawn, and so on, and the coming out and going in of visitors can be regulated. Living quarters for the resident personnel must be comfortable, and separate though not far from the hospital building. The hospital plant need not be elaborate, but even a makeshift arrangement must provide the following:

(1) Special labor and delivery rooms.
(2) A nursery where infants can be kept out of the reach of the general public.
(3) A section for isolation of infected cases.
(4) One or two single rooms for sick women.

These we have managed to secure at Oneida though like everybody must while the war is on, we have had to get along with a building designed for other uses.

Equipment of the building, one of the greatest items of expense in establishing an institution of this sort, should be kept at a minimum, but that minimum is of necessity rather high. There must be electric light, with a generator on the premises if need be. Running water is of course essential, and it should not only be sanitary but chemically suitable for the cleansing of apparatus. Sanitary sewage disposal of course. Provision for doing laundry daily should be made, preferably at the hospital, elsewhere if it can be done more economically. Central heating of some kind is necessary, even in the warmest parts of this country. There must be a good kitchen, but there should be only one for patients and staff, for the average quality of the food is always higher if all hands share alike. Small separate facilities may be provided for infant feeding, but no diet kitchen will be needed. Generally speaking, the housekeeping equipment except for the laundey comes somewhere between that of a boarding-house and a hotel.

As a good deal depends on the choice of furnishings and equipment for the hospital proper, we will describe the ideal and the minimum in some detail. First, the main wards, where the normal post-partum patients, the bulk of the adult hospital population, will be. These may be as large as necessary according to the clientele of the hospital. Ideally they should be divided by part-glass screens into cubicles, at best one bed or at most four beds to the cubicle, and equipped with modern hospital beds. As a minimum they may be undivided rooms with cots having room to maneuver a stretcher among them. Dividing curtains, by the way, though conducive to privacy, are dangerous collectors and distributors of dust. Ideally there should be a utility room with a bedpan sterilizer to each ward, and running water in each cubicle, things we will wait for until after the war. Smaller rooms are needed in about the ratio of one bed for every four in the big wards, as sick patients, while they do not come in the ratio of one to every four well ones, stay much longer in the hospital.

Ideally the labor-rooms should be single, air-conditioned and soundproof; as a minimum, patients in labor should be kept somewhere out of the main wards and out of reach of visitors. Where the staff is small, as is the case with the type of institution under discussion, means must be provided for restraining patients to prevent their falling out of bed. This is done at Oneida by use of a binder similar to one devised by Dr. C. J. Collins of Orlando, Fla. In its essentials it is an abdominal binder sewn to a draw-sheet which in turn is lashed to the bedstead.

Properly there should be a nursery for each large ward, equipped with running water, work-tables and a plate-glass show window. Actually we get along with just an ordinary room and home-made bassinettes on a rack. There must at the very least, though, be a nursery of some kind, for if babies are left in the wards they are continually molested by visitors or by their mothers.

Sterilizers for the instruments and supplies for the delivery room, should include one for boiling and a 15-inch or larger autoclave. The bare minimum is a stove, a home pressure-cooker for dry goods and a pot big enough to boil a pair of obstetrical forceps. One can even struggle along, as on occasion we have been obliged to do, without drapes or dry supplies at all, by using wet gloves and taking sterile instruments right out of the pan, but that should rarely be necessary.

With everything of the best available in plenty, there should be two fully equipped delivery rooms in the main delivery suite and one in the isolation unit, but as a minimum there must be one room in the "clean" part of the hospital where the obstetrician can work free of interference by the patient's relatives, provided with some sort of delivery table, a good light, and a place where he can scrub his hands, while in the isolated or "dirty" part of the hos

pital conditions must be at least as good as with the best home-delivery arrangements. The delivery table at best need not be elaborate, most ordinary examining tables can be adapted to serve very well, but in order to economize on personnel, even the minimum outfit must have efficient leg-holders. Excellent lighting, as shadow-proof as the most expensive special lights and much cooler to work under, is provided by two five-foot, hundred-watt fluorescent tubes such as are used in grocery-stores, suspended transversely over the foot of the table. At the worst there should be two good bright lights shining on the field of operations. In the event of current failure, the best is a battery light with charger, the minimum a rank of kerosene lamps.

With the proposed small staff, gas anesthesia equipment is superfluous, as there is nobody to operate it; oxygen, however, should be available for resuscitation with even the scantiest set-up.

Instruments need be neither very elaborate nor numerous at the most. One style of obstetrical forceps, if it be provided with an axis traction attachment, is enough. The minimum outfit must include syringes and needles for local anesthesia, and enough general operating instruments to perform cesarean section, essentially a simple procedure that does not require many. There are many little devices, such as the use of spring clothespins for towel clips, that make the instrument budget cover more.

Transfusion is likely to be needed oftener in Obstetrics and Gynecology than in any other civilian specialty, and since it is not only difficult to find donors but practically impossible to have serodiagnostic tests done promptly in an isolated place, the best solution would seem to be to establish a plasma bank. In maternity hospitals this can be kept up by saving placental blood. The equipment and procedure are not elaborate, the difficulty at Oneida proves to be in getting suitable water to cleanse the apparatus, a difficulty that applies equally to the use of other intravenous fluids.

Diagnostic instruments need be no more than one usually has in the office: scales, sphygomanometer, ophthalmoscope, stethoscope, pelvimeter and speculum. X-ray, while highly useful, can be done without in most cases, by judicious use of sterile vaginal examination, careful palpation and trial labor. Its absence puts an added burden on the diagnostic skill and judgment of the obstetrician, but he can school himself to do surprisingly well without it. Moreover it should often be possible to send elsewhere some of those who need x-ray examination.

As for laboratory facilities, they are indispensable to investigation, yet, (and at this some of my teachers will be horrified) it is possible to do excellent obstetrics, even the management of eclampsia for example, with only the simpliest laboratory aids, i. e., ordinary urinalysis and blood counts. Lacking blood chemistry, bacteriology (except smears) or tissue pathology the bounds of science are not advanced, nevertheless good obstetrical care can be given without the added equipment and personnel that these require.

Even more important than the building and its equipment is the staff. The number of housekeeping personnel will vary chiefly with the size of the institution and according to whether or not the laundry is done on the premises. A housekeeping supervisor who is not a member of the medical or nursing staff is essential; this job may be combined with that of clerk. A specially trained dietician is not necessary, as for the most part good plain catering will do, and the occasional special diet can be described by the attending obstetrician or a nurse. A good cook who can prepare the better elements of the ordinary diet of the region may make the difference between failure and success. A handy-man Jack-of-all-trades is also required, someone who can do the odd jobs of carpentry and plumbing and wiring that are always being needed even in a new establishment. For the cleaning, even the heavier part of it, women are preferable, as men either dislike being on the wards with the women or like it too well.

Getting a suitable nursing staff is a vexatious problem these days and will always be one of the most difficult tasks in a place of this kind, remote as it is from urban amusements. Nursing aides may provide a partial solution; student nurses will generally not be available to so small a hospital. There should be a minimum of one graduate nurse on duty and one on call at all times, the rest of the force being perhaps made up with nursing aides. These aides must not be the "practical nurse" type who are almost without exception old and set in deplorable ways, but should be young enough to be adaptable, and preferably trained at the hospital where they will work. The graduate nurses need only be from good training schools and need not have had special obstetrical instruction.

Even the head nurse should be first of all a good manager, able to organize the nursing routine but not afraid of doing full share of the actual work, and should thoroughly understand the preparation and maintenance of supplies and instruments used in a maternity service. Most of all she must be capable of keeping a harmonious crew at work in a remote and unglamorous place. Personality and native ability are far more important than training in a place like this, and psychological stability is indispensable, for a secluded, somewhat ingrown microcosm such as this type of hospital inevitably will be is sure to bring any queer streak to the surface. In short, the choice of a head nurse needs closer attention than is commonly given to the choice of a wife.

The medical staff consists of two divisions, resident and visiting. On the resident staff there is the medical director who is employed full time, paid a sufficient salary to attract an able man, and should be allowed to devote all his energies to clinical work in connection with the hospital. He should be qualified for certification by the American Board of Obstetrics and Gynecology, and of course ought to be a man of great ingenuity as well as infinite patience and boundless endurance. Anyhow he should be resigned to a protracted period of all work and no play. His duties should be:

(1) To direct the clinical work of the hospital and perform or direct all difficult deliveries and operations;

(2) To serve as consultant to members of the visiting staff on all private cases in the hospital and, whenever asked, on cases within reasonable travelling distance elsewhere;

(3) To conduct prenatal, post-natal, and if cases warrant it, gynecological clinics at the hospital, and to serve as consultant in prenatal clinics elsewhere in the area served by the hospital.

Administrative and non-clinical duties ought to be kept at a minimum and the director should not be burdened with details of housekeeping and maintenance of the plant. The number of other members of the resident staff must depend on the size of the institution, but there should be at least one, to provide a measure of relief for the director. The assistants should preferably be equivalent to assistant residents on a teaching service, but the ordinary or garden variety of interne serving the obstetrical part of a rotating service would suffice. The lack of any assistant at Oneida, occasioned by the wartime shortage of doctors with which we are all so heartbreakingly familiar, has been one of our greatest handicaps.

The visiting staff consists of all licensed Doctors of Medicine who wish to bring their private patients to the hospital. All such patients are expected to be seen in consultation by the director of the hospital, and their management is expected to meet the standards set by him, but is otherwise left as much as possible to the discretion of the private physician. Cesarean section will be done only after a note giving the indication has been signed by the attending physician and the director of the hospital. No charge is to be made for consultation either inside or outside the hospital.

Our first, experimental model of rural lying-in hospital, at Oneida, in the mountains, has already taught us a great deal, and provided quite a few surprises. In the first place, acceptance of the idea of hospital delivery, by the people of a region where granny midwives had heretofore "ketched" four-fifths of all the babies born, has been very rapid, much more so than we had hoped. Acceptance of the idea of a special hospital that does not admit cases of diphtheria or apoplexy or gunshot wound and of a special doctor who cannot be called upon to attend such cases has also been easier than expected. Getting undelivered patients to stay in when hospitalization is indicated has been very easy, indeed there has been constant pressure to make the hospital a cheap boarding-house for normal patients awaiting labor, but on the other hand it is difficult to keep even dangerously sick people in long enough post-partum, they think that is all anticlimax. Acceptance of analgesia, of episiotomy and perineorrhaphy, all of them procedures heretofore unheard of in our neck of the woods, has been immediate and even enthusiastic. Objections to keeping the relatives out of the delivery room, contrary to our expectations, have been almost absent. On the whole our relations with the general public have been much easier than we expected.

Our greatest mistake so far was to accept patients before we had adequate equipment and staff to care for them. This forced us to do a great deal of improvising, and made a lot of discomfort for doctor, nurses and patients, but luckily occasioned no fatality or permanent injury. We have been blessed so far with luck in plenty, and went six months to the day from our first delivery to our first maternal fatality, that

one being a case of heart disease that even the laity could see was hopeless from the start. It was eight and a half months before we lost an infant that should have been viable, previous infants to die having been monsters or small prematures. Infections developing in the hospital remained at 4% of the women delivered, in the first six months, which compares favorably with home delivery services. In some ways the smallness of our staff has been a blessing in disguise, as with our use of local anesthesia, which we have had to use for the lack of an anesthetist or even an extra nurse. With local anesthesia, despite the very liberal use of seconal-scopolamine analgesia, the incidence of delayed breathing in our infants has been almost nil, and the mothers rarely have any postpartum nausea or vomiting. Local anesthesia, by the way, is also less expensive with respect to the drugs as well as the help required, the total cost of the solution injected being less than five cents.

We hope that with the rural lying-in hospital we are developing one way of extending good obstetrical care to women who would otherwise never receive it and that our efforts, even if they are not imitated, may stimulate others to work toward the same end.

DISCUSSION

A. T. McCormack, Louisville: Dr. Caffee has presented us a distinct departure from the ordinary presentation of a subject. He has not only told us about the details of an obstetrical hospital, but he has told us about a departure from our ordinary procedure that presents principles that are of tremendous importance to the profession.

We have been charged by those who do not understand our principles with too great concentration of our personnel in the cities. The profession realizes, I am sure, that every city and every industry in the United States was built by our farm population, and the preservation of the health of our farm people is the only hope of civilization. No civilization has ever been organized and industrialized in the history of mankind that has not shortly after destroyed itself. It is perfectly apparent that we must have food and that we must raise food and that we must have people living in country homes on farms, creating healthy children, in order to keep industry and to keep urban civilization going, because mankind has not yet made sufficient progress to preserve itself in industrial or urbanized life long enough to maintain a national integrity.

When the study was made in Kentucky, we found that in this particular area seventy-five per cent of the mothers were delivered by midwives, so-called, and the average one of these midwives delivered two cases a year, which meant that they were just neighbors who knew nothing about it and if the woman got along all right they had every reason to thank the Great Physician, because He was the only one in attendance who knew anything about what was going on.

When this survey was made and we found this vacant hospital, built by a saintly woman and physician, empty and available, we availed ourselves of it, under your instructions, with your approval, and have developed this experiment there. It has been most satisfactory.

Dr. Caffee and his good wife have devoted themselves to it in a way that has been extremely gratifying. The most interesting thing about it to those of us who have been watching it has been the way the people of this section have taken them into their hearts, realizing that they have come to them as members of the community, seeking to serve them and to be friends of theirs.

I don't think anything that has ever been undertaken under the auspices of the Association by your State Department of Health, which, of course, is under your control, has been more satisfactory than this experiment that has been performed. We would like very much to have any of you who have any thoughts about it to say so, and we would, of course, like to hear from you about the work at any time, because we are striving our very level best to preserve all those ideals for which the profession has so long stood in adverse circumstances, in a condition of intellectual poverty that would rather appall you if you realized just exactly what is going on. These people are the salt of the earth; they are bred of the same stock we all are, of the same sort of good raw material that makes Kentuckians and makes good Americans, and we can look forward with confidence to the birth and care and saving of many children's lives and of many mothers' lives, and starting them on the right road as all of us are trying to do in this world of care.

S. S. McReynolds, Russellville: I would like to ask what this service costs the patient, whether the charges are based according to conditions, that is, the financial ability of the patient, or whether there is a flat fee for all cases.

Henry H. Caffee, (in closing): No, sir, the charges are really nominal. The total cost to a private patient in the same whether she be delivered in the hospital or at home, and a portion of that goes to the hospital; the rest goes to the private physician, so that his honorarium is actually a little less if he delivers the patient in the hospital, but he has the convenience and help of the hospital available to him.

We ask them all to pay a minimum fee, and

to those that can't we don't say anything more to them about it. The usual minimum charge is a dollar a day, and that covers everything Oh, it doesn't cover everything, but that is all they pay.

We thought at first we would be able to get a good many payments in kind, that we would be given chickens and meal and vegetables, and so forth, but we found that the people who have those things also have a little bit of money and they have been conditioned, I suppose, principally by farm payments, and so forth, to dealing on a cash basis entirely; the old commodity system has gone out of use and they don't do that any more.

We have an interesting little spot, and I think you will find the hospital is just a little different from anything you have ever seen before. We are quite a way out, up a bad road, but don't let that stop you. We just love company and invite you all to come and see us.

THE MANAGEMENT OF RABIES CONTACTS

GEORGE F. BROCKMAN, M. D.
Greenville

There appear to be no accurate statistics on human exposure to rabies in Kentucky, but such indirect evidence as Health Department reports indicate that, on the average, the Kentucky physician is consulted once every year or two for advice in such a case. He is thus called upon to pass judgment on a serious condition, having a morbidity of 15-35%, and a mortality of 100%, with which he has no large body of personal experience, and on which the readily accessible literature is not as helpful as he might wish.

The hazard of the exposed patient developing rabies is a combination of two factors; the presence of rabies in the exposing animal, and the degree of exposure of the patient to the animal.

THE DETERMINATION OF ANIMAL INFECTION: Wherever possible, the diagnosis of rabies in the animal is a matter for laboratory determination. The suspected animal should be retained under observation until its death, to allow the development of rabies to the point of most certain laboratory diagnosis. Premature slaughter of the animal is the principal cause of negative laboratory reports on infected animals, as discoverable evidence of infection increases constantly until death. If the animal has not died within ten days to two weeks, the available evidence would indicate that it did not have rabies in a transmissible stage, as infection of the saliva is a late development.

Read before the Muhlenberg County Medical Society.

For practical purposes, the microscopic examination of the brain tissue is the laboratory method of choice. Sulkin and Willett found that experienced laboratory workers reported 4% false negatives, and Leach reported 12%, when the microscopic results were checked by animal inoculation. Allowing the full development of infection in the animal by a proper observation period before slaughter would no doubt serve to reduce this percentage of error. False positives appear to be much less frequent, probably about 1-2%.

Animal inoculation is regarded as the most reliable single method of diagnosis, but for clinical use has the almost insurmountable disadvantage of requiring a minimum of eight days for completion, even with the mouse method.

Frequently, the exposing animal is a stray, who runs off, or escapes observation for some reason. In these cases, the only feasible procedure is to obtain the best history possible on the animal, and in case of any doubt, assume the animal to be rabid, particularly during rabies epidemics, or in regions of high endemicity.

THE DEGREE OF THE PATIENT'S EXPOSURE: Where the patient presents definite bites from a rabid animal, opinion is practically unanimous that vaccine therapy is indicated, and can be summarized in Muckenfuss' statement, "I myself am unacquainted with any bite of a known rabid animal resulting in a definite wound which should not be followed by rabies vaccine."

If, as is frequently the case, the patient presents a lesser degree of exposure than a definite bite, his status becomes much less certain. The Paris Conference on Rabies recommended that immunization be performed following bites, or whenever a mucosa had been contaminated with rabid saliva, even though no wound has been inflicted. The penetrability of the intact skin to various infectious agents has been a matter of considerable speculation and experimentation with little general agreement secured. Recent work has shown the grossly intact guinea pig skin penetrable by the virus of lymphocytic chorio meningitis, which would tend to support the position of the Paris Conference. On the other hand, Denison and Dowling report that of 45 investigated rabies deaths in Alabama, demonstrable bites were the source of infection in all cases, and Ratcliffe found definite wounds present in 85% of 40 rabies deaths in Indiana. The figures of the League of Nations also indicate that death is much more likely to follow a definite

wound than "no visible lesion." Denison and Dowling report ten years success in handling 10,000 cases of rabies exposure in a region of high rabies prevalence by adherance to the following criteria:

When Treatment Is Not Advised: Treatment is not advised following (1) contamination of old cuts, sores, abrasions, scratches or hangnails with saliva of known rabid animals; (2) "pinches" in which the skin is definitely broken but the clothing neither torn nor penetrated; (3) handling, eating after, sleeping with, kissing or other intimate exposure to rabid animals; (4) drinking milk of rabid cows, eating meat of rabid animals; (5) bites of any animal living fourteen days from the time of biting; (6) bites from fleas from rabid animals; (7) any exposure to a case of human rabies other than an actual bite, or direct contamination of fresh open wounds, or (8) any exposure of an nonrabid animal just bitten by a rabid animal except when infected saliva is directly transmitted to a fresh open wound.

Local Treatment. Considerable discussion and experimental work has been devoted to the matter of local treatment of lesions, with most of the evidence favoring prompt cauterization with fuming nitric acid. The experimental work has fairly conclusively demonstrated that, at least in the majority of instances, transmission of the virus within the body is exclusively through nerve channels at a rather slow rate. The virus inoculated into the wound is fixed in the local nerve structures, and is available for destruction locally for an appreciable time. Several workers have reported from 45 to 100% success in protecting experimentally infected guinea pigs solely by cauterization with fuming nitric acid 24 hours after inoculation. Fuming nitric acid is the cauterizing agent of choice, having a number of advantages over such substitutes as carbolic acid, iodine, and mercurochrome.

Local treatment is in no sense a substitute for the specific vaccine. It is essentially a first aid measure which assists in minimizing the danger to the patient by possibly reducing the volume of virus with which he is infected, and in minimizing his danger from other forms of bacterial infection which may be present in the wound.

Vaccine Treatment: Vaccine treatment is the one specific in rabies prevention, and all serious students of the problem have agreed that its use is mandatory in all cases of definite exposure. Its use is premised on the production of immunity in the patient during the prolonged incubation period of the disease, while the virus is presumably taking its slow course up the nerve pathways to the central nervous system. For this purpose, either weakened or killed virus is injected to lead to the production of immune bodies in the patient. The Semple method, which appears to be most popular in this country, requires 14 constant sized doses of phenol-killed virus, and according to the League of Nation's study, is at least desirable as any other method, from the standpoint of effectiveness and freedom from reaction.

The largest series reported on is that of the Pasteur institutes in various parts of the world, which had a gross death rate of 0.36 per 100 for over three-fourths million cases. Factors found to increase this death rate were: delayed beginning of treatment, unusual severity of infecting bites, and presence of wounds on the face and neck. American studies have confirmed particularly the importance of delayed treatment in contributing to mortality.

Early treatment is particularly important in bites of the head and neck. These cases should begin the treatment within 24-hours, if there is any suggestion of rabies in the biting animal. If more complete investigation rules out rabies, treatment can be discontinued. Bites of the lower body have a sufficiently prolonged incubation period to allow investigation before treatment is begun.

In the Pasteur Institute series, treatment reactions were encountered in a proportion of 1:5,441 treatments with fatalities of 1: 18,446. Three types of reactions are recognized:

1. An acute ascending paralysis, having a sudden onset with fever and headache, and frequently resulting in complete paralysis within two to three days. Mortality, usually due to circulatory arrest, is 30 to 40%.

2. A dorsolumbar myelitis, with gradual onset. It frequently involves principally the lower extremities, which become paralyzed and anesthetic. Spontaneous resolution within a few weeks is the rule, unless intercurrent infection develops.

3. A peripheral neuritis, most frequently involving one or both facial nerves. These cases make a rapid recovery, usually.

Conclusions

1. Prompt cauterization of wounds from suspected rabid animals with fuming nitric acid is desirable, and may have a decisive effect by the reduction of the volume of virus to which the patient is exposed.

2. Every patient with a definite exposure

to the saliva of a known rabid animal should receive vaccine treatment.

3. Adequate, though not leisurely, investigation of the wounding animal may be made, and still allow sufficient time to begin treatment, in bites of the lower body. Suspicious bites above the clavicle should be treated first, and the animal investigated later.

4. Patients with remote or doubtful degrees of exposure may be in less hazard of rabies than of treatment reactions (1:5,441) or treatment fatalities (1:18,446).

BOOK REVIEWS

MANUAL OF STANDARD PRACTICE OF PLASTIC AND MAXILLOFACIAL SURGERY: Prepared and edited by the Subcommittee on Plastic Maxillofacial Surgery of the Committee on Surgery of the Division of Medical Sciences of the National Research Council, and Representatives of the Medical Department, U. S. Army, Robert H. Ivy, Chairman; John Staige Davis, Joseph D. Eby, P. C. Lowery, Ferris Smith, Brig. Gen. Leigh C. Fairbank, Medical Department, U. S. Army; Lt. Col. Roy A. Stout, Dental Corps, U. S. Army. With contributions by John Scudder and Frederick P. Haugen. 432 pages with 259 figures, containing 899 illustrations. Publishers, W. B. Saunders Company, Philadelphia and London. Price $5.00.

The authors of this work are to be complimented on the splendid presentation which they have outlined. This book is recommended as interesting reading for civilian and military surgeons. It will make a valuable reference book in the library for any physician or dentist.

The most important fact stressed is that complete knowledge of the anatomy of the part is the most important factor in this work. Emphasized is the dual purpose of maxillofacial surgery, namely function and cosmetic effects.

Careful planning from the very first is well considered. Much delay can be prevented in the initial operation by careful operative procedure in repairing as much of the defect as possible, thus enabling primary healing to minimize subsequent operative procedure. This point is stressed by the British in their recent work on injuries of the face. By carefully utilizing portions of the face having good blood supply, many defects of the face can be cared for at the initial operation.

Where fractures of the facial bones are involved they have demonstrated that the remaining fragments which have periosteal attachments should be preserved and fixed in as nearly normal position as possible; even if these fragments are quite small they will serve as nuclei for new bone growth, and, in some cases, avoid the insertion of bone graft or osteoperiosteal graft later.

The illustrations in this book are well worth careful study, especially the Balir-Ivy intramaxillary wiring and its modifications for fixation and immobilization of fractured segments of the mandible and maxilla. Correct occlusion of the remaining teeth, fixed and immobilized, assures the patient of less deformity from contracting scar tissue, and, should portions of the bone be lost, this procedure will make grafts which are to be inserted later, a much easier procedure.

In those cases where the individual has lost the natural teeth, I prefer a small antral trocar for the insertion of circumferential wiring since it makes for less scarring of the skin surface of the face.

In the consideration of fractures of the nose, I feel that the procedure advised can be improved upon by the use of a splint which I devised some years ago and gave to the profession, which offers support of the nose from within instead of pressure from without. In my hands I have never had any trouble molding the external surface of the nose into position. The big problem has been to prevent sagging of the bridge of the nose, flattening the so-called saddle shape appearance, due to a lack of support from within. The splint which I have devised prevents this deformity and does not interfere with normal drainage of the sinuses.

The method described and illustrated for depressed fractures of the malar and zygomatic arches can, in my opinion, be improved by the insertion of a specially designed hook that will only make an icepick opening through the skin over the infraorbital ridge of the fractured arch. This instrument has a cross bar handle and is shaped something like an ordinary shoe buttoner. It has been used by myself and others at the Louisville General Hospital with splendid results over a period of years and I am sure constitutes a very definite improvement over the passing of a sound or a large periosteal elevator through the external surface of the face in order to elevate these depressed fractures. It is the exception rather than the rule that the malar bone or the zygomatic arch will not stay in position when one time elevated into its normal position with the fractured surface approximated to the remaining bone surface of the face. The few cases where external traction is needed are beautifully illustrated.

The chapter on gun shot wounds is splendidly illustrated and establishes the fundamental principle that not all foreign bodies must

be removed; that injury ceases when the bullet stops except in cases where the foreign body is jacketed (steel or copper) bullet and this fragmented. If in close proximity to large vessels or nerves, the removal of such foreign bodies is usually imperative. In this chapter again the necessity for mobilization of shattered segments of bone is emphasized. Careful X-ray studies will determine the nature of the foreign body. When the foreign body passes through the bone or teeth many fragments are driven into the soft tissue and the authors are to be complimented on their admonition that all these detached fragments should be carefully sought out and removed. They are potent sources of infection and should be removed as early as possible.

The chapter on maxillofacial prothesis beautifully demonstrates what can be done by an artistically minded individual who has specialized in this particular work. They have been worth a great deal to me in private practice and I am sure with the new materials, fleshlike appearance as they are, that even greater work is to be expected in this field.

The anesthetist is one of the major partners in the maxillofacial surgery team. In the hands of an experienced anesthetist with the various agents now available, the author has demonstrated that anesthesia is not the problem that it one time was in these cases. Intravenous anesthesia, when indicated offers distinctive advantages but should only be given by those who have been carefully trained and only in cases where indicated.

Maxillofacial surgery is a highly specialized work which could well command the attention of the best trained men in the profession. With careful planning and with careful team work marvelous results have been secured and I predict greater success will crown the efforts of those who master this subject and develop the patience and the team work which is needed for its successful performance.

E. C. Hume, D. D. S.
Louisville

THE HAND—ITS DISABILITIES AND DISEASES: By Condict W. Cutler, Jr., M. D., F. A. C. S., Associate Surgeon, Roosevelt Hospital; Director of Surgery, Welfare Hospital· Consulting Surgeon, New York Dispensary; Chief, Emergency Medical Service, New York County; Fellow of the American Surgical Association. 572 pages with 274 illustrations. Philadelphia and London: W. B. Saunders Company, 1942. Price $7.50.

The great point about this new book is that it is not on infections alone, but on injuries, traumatisms, abnormalities and other diseases and disabilities of the hand.

Statistics show that the hand and fingers are more vulnerable to industrial injuries than any other single part of the body. With millions of people engaged in high-speed war production, the physician and surgeon will have to treat probably the greatest number of conditions of the hand they have ever seen.

Now as to disabilities and diseases other than injuries: you'll get treatments of abscesses around the nail, furuncles, carbuncles, cellulitis, infections of flexor tendon sheaths, deep abscess of forearm, tetanus, erysipelas, tularemia, congenital and also acquired deformities, tumors, etc. Dr. Culter stresses always the necessity for restoration of normal function and as a special aid to the practitioner he has included a 49-page section on the hand manifestations of constitutional diseases.

This book is both medical and surgical. It gives specific guidance in the use of today's proved medical therapy and includes the latest surgical technics, from minor office procedures on through amputations.

ADVANCES IN PEDIATRICS: Edited by Adolph G. DeSanctes, New York Post Graduate Medical School and Hospital, Columbia University, New York. Associate Editors, L. Emmett, Johns Hopkins Hospital, the late Graeme Mitchell, Children's Hospital, Cincinnati, Robert A. Strong, Tulane University, Frederick F. Tisdall. Interscience Publishers, Inc., 215 Fourth Ave., New York. Price $4.50.

As it is impossible to keep pace with recent advances in text books, as there is an interval of several years between each edition, the leading authorities on the subject have brought forth this book to meet the needs of the general practitioner and specialists. It is not a completion of abstracts, but a collection of personalized monographs.

SYNOPSIS OF PATHOLOGY: By W. A. D. Anderson, M. D., Assistant Professor of Pathology, St. Louis University School of Medicine, Pathologist St. Mary's group of Hospitals, with 294 text illustrations and 17 color plates. C. V. Mosby Company, St. Louis, Publishers. New 1942 Edition. Price $6.00.

This convenient size volume is intended to fill a gap which has existed between the very elementary manuals and the larger text books and reference works. By presenting this subject in a compact and condensed form it is very useful to the medical and dental student studying general pathology and to the clinician who must maintain familiarity with the foundation sciences of medical practice. The complexity of pathology combining so many substances, makes a condensed form a valuable aid and an essential volume to a physician's or surgeon's library.

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COUNTY SOCIETY REPORTS

Boyd: At the regular dinner meeting which was held at the Henry Clay Hotel on December 1, 1942, the following officers were elected for the coming year:

H. R. Skaggs, President; M. C. Prichard, Vice President; R. G. Culley, Secretary; C. K. Kercheval, Treasurer; E. C. McGehee, Delegate for two years; H. R. Skaggs and J. D. Williams, alternate delegates; T. D. Goodman, Censor; Price Sewell, Proctor Sparks, and C. K. Kercheval were appointed on the committee for Public Health and Legislation.

Since the last meeting Dr. Edward R. Palmer, who was our speaker at the November meeting has expired. Dr. Palmer was a great inspiration and help to our Society as he had been to the many who have come under his influence.

Mr. J. H. Mathewson gave an interesting talk concerning Hospitalization and introduced several plans whereby the surgical and medical fees would be included. S. C. Smith made a motion that a committee be appointed to study plans and gather suitable information along this line.

There being no other business the meeting adjourned.

R. G. Culley, Secretary.

Campbell-Kenton: The regular monthly meeting of the Campbell-Kenton County Medical Society was held at St. Elizabeth Hospital on Thursday, December 3, with ten members present. The meeting was called to order by the president, Doctor Garrison, at 9:15 P. M. The minutes were read and approved.

The applications of Doctors J. Cornell and Philip Katz were voted upon. Doctor J. Cornell was elected an associate member. The application of Doctor Philip Katz was rejected.

The following officers were elected for 1943: N. A. Jett, President; Oscar Frickman, Vice-President; Joe Northcutt, Treasurer; Robert L. Blitz, Secretary.

A Board of Censors was elected to serve the indicated number of years: Oscar Frickman, one year; F. E. Bell, two years; S. P. Garrison, three years.

Representatives of the Covington Lodge of Elks spoke on the desirability of inviting the mobile case finding X-ray unit to Campbell and Kenton Counties. After considerable discussion a motion was made by Chester Morris and seconded by William Miner to invite this unit to Campbell and Kenton Counties for use in the schools and industrial plants. Dr. John B. Floyd of Richmond, is to be notified of this action.

The Kenton County physicians under 45 years of age called for military service are: Doctors C. M. Air, M. J. Weber, Ludlow; Bie-

ver, Latonia; G. R. Coe, E. W. Ellis, Erlanger; Robert Cook, Morning View; W. R. Houston, Elsmore; L. E. Davidson, P. W. Hess, H. J. Humpert, C. J. Katz, J. D. McAtee, W. V. Pierce, L. M. Quill, R. E. Reichert, Reik Louis, M. L. Rich, J. C. Riffe, J. J. Rolf, M. R. Walsh, all of Covington.

The Campbell County physicians under forty-five years of age called for military service are: Daniel Boeh, Silver Grove; Joseph S. Faulkner, Bellevue; J. L. Donnelley, J. O. Haizlip, Marcellus J. Schwegman, Edward J. Straham, Raymond F. Weaver, Charles E. Work, all of Ft. Thomas; Carl G. Hoffman, Southgate; Stuart G. Blitz, Milton V. Caldwell, Gustav T. Eith, A. F. Helmbold, George J. Hermann, William I. Huesing, A. C. Poweleit, John F. Reitz, Richard J. Rust, Arthur F. Schultz, Albert J. Vesper, Fred H. Welte, all of Newport.

There being no further business and no paper scheduled for the evening the meeting adjourned.

Robert L. Blitz, Secretary

Graves: The Graves County Medical Society has lost one of its most valuable members, H. A. Gilliam, age 58, who died November 4th at The Fuller Gilliam Hospital, Mayfield, of coronary occlusion. He was a graduate of Louisville University, Medical Department, 1909; member of the Kentucky Medical Association; Post graduate work at Johns Hopkins University, Baltimore and at New York Post Graduate Medical School, and at Harvard University, Medical Department.

He did private practice in Milburn, until 1928, at which time he removed to Mayfield, and was one of the founders of the Fuller Gilliam Hospital and Clinic. He continued his practice in connection with this institution until his death.

H. H. Hunt, Secretary.

Graves: The Graves County Medical Society met at the Hall Hotel Wednesday evening, December 16, at 6:30 o'clock.

H. V. Usher, President, called the meeting to order. Hon. Bob Humphries addressed the meeting on: "When I was a Druggist in Mayfield." His reminiscences were very interesting and were enjoyed by all of the doctors.

W. S. Hargrove read a paper on Rheumatic Fever, Rheumatic Heart Disease in Children. This was a most excellent paper, which was discussed by all the doctors.

Dr. Hargrove, who is 78 years old, is one of our outstanding country doctors, and has been in the active practice for over half a century.

The election of officers for the year 1943, was as follows: J. H. Shelton, President; N. M. Atkins, Vice President; W. J. Shelton, D. H. Ray, W. S. Hargrove, Censors; H. H. Hunt, Delegate: H. V. Usher, Alternate; H. H. Hunt, Secretary and Treasurer.

Resolutions of respect upon the deaths of Dr. H. A. Gilliam who passed away November 2, and Charles B. Bard, who died December 3, were read and adopted.

The Society then adjourned, to meet again January 15, 1943.

H. H. Hunt, Secretary.

Hopkins: The Hopkins County Medical Society held its regular meeting at the Hospital at 7:30 P. M. December 10, 1942. The program consisted of a paper on "Pharmacopeia" given by Mr. M. E. Pate.

The following were present: Drs. J. E. Taylor, F. P. Strother, A. F. Finley, W. L. Moore, Wm. F. Stucky, Wm. Garnier and Mr. M. E. Pate.

W. H. Garnier, Secretary.

Harrison: The Harrison County Medical Society held the annual meeting at the Hotel Harrison December 7, 1942. This was the first December meeting since the organization of the Society when no visitors were present, due to war conditions.

Dinner was served and some case reports were read. J. M. Rees reported a case of the sudden death of a four-year old child from Status-lymphaticus. The child died on the road to the hospital.

R. L. Loftin reported a number of cases of spasms of the trapezius muscles among school children in the county.

Drs. Moore, Rees and Wyles were appointed a committee to draft resolutions on the death of Dr. Josephus Martin. The secretary was also instructed to send telegrams to our members in the military service, viz: Drs. H. R. Moody, K. W. Brumback and H. Tod Smiser.

Members present were: Drs. J. M. Rees, R. L. Loftin, C. L. Swinford, R. C. McMurtry, H. C. Blount, J. P. Wyles and W. B. Moore.

The president called for the election of officers for 1943, which resulted as follows: President, C. L. Swinford; Vice President, H. C. Blount; Secretary-Treasurer, W. B. Moore; Censor, H. C. Blount.

The Committee, appointed to draft suitable resolutions upon the death of Dr. Josephus Martin, desires to offer the following report:

The members of the Harrison County Medical Society were very much distressed during the long illness and at the death of Dr. Josephus Martin, who was an active member and took a keen interest in the welfare of the Society and also contributed of his time and means to make the meetings both interesting and instructive. His presence will be sadly missed.

THEREFORE, Be it resolved: That the

members of the Harrison County Medical Society extend to the family of the deceased their heartfelt sympathy in their sad loss.

Be it further resolved: That a copy of these resolutions be spread upon the minutes of this Society; a copy of the same sent to the family of the deceased, and a copy to the Kentucky State Medical Journal.

W. B. Moore, Chairman
J. P. Wyles
J. M. Rees

There being no further business to transact the meeting adjourned.

W. B. Moore, Secretary.

Jefferson: The 854th stated meeting of the Jefferson County Society was held Monday evening, December 7, with 78 members and guests present. The President called the meeting to order at 8:05 P. M.

The Secretary read the minutes of the previous meeting and they were approved as read.

The Secretary read a report from the Necrology Committee on the death of E. R. Palmer. The resolution will be spread on the minutes and a copy sent to the family.

The Secretary read a letter of appreciation from the Woman's Auxiliary for the generous contributions of the Society to their plans for the entertainment of the visiting Kentucky Medical Auxiliary members.

The Secretary read a letter from Mr. F. H. Bick, Assistant Director of Health in charge of Hospitals expressing appreciation for the prompt consideration of the Medical Economics Committee and the Society in regard to the proposed plan of investigation of patients at the General Hospital Clinic.

The Secretary announced that Mr. T. D. Wilkinson of the Abbott Laboratories had asked for a letter from the Society to submit to the Gasoline Rationing Board in Washington recommending that the Society felt that all drug representatives be granted sufficient gasoline to do their regular work. He asked for recommendations.

E. L. Henderson recommended that the Secretary be instructed to write such a letter. Motion seconded.

The President felt that the Society should not indulge in action for firms whose business is purely commercial, however worthwhile it may be.

Motion put to a vote and lost. Herman Mahaffey asked if anything further had been done about seeing if Miss Walker could handle the gasoline rationing books for the doctors.

J. B. Lukins stated the proposal had met with favor here, that arrangements had been made to have two people assist Miss Walker, but in reply to a telegram to Washington, the Society was informed this could not be done.

Morris Weiss spoke of the problem of supplying civilian doctors to work at the Induction Center. The Eye, Ear, Nose and Throat men have worked out their own schedule which has operated very successfully. The same held true for the chest men until July when changes in personnel here in Louisville has caused considerable difficulty in finding enough men unencumbered with multiple duties to carry on this work. Dr. Weiss talked to Dr. Walter Hume of the Public Relations Committee and understood that committee would be glad to do something about supplying needed doctors if the matter were presented to the Society.

Captain W. B. Atkinson, State Medical Director for Selective Service, stated he inherited this problem from Major W. H. Lipscomb, his predecessor, and that the work done had been commendable.

Irvin Abell stated this problem would be referred to Dr. Hume's committee for consideration and report.

Margaret Limper stated the Society should take further action in regard to compensation for physicians who have gone into service. She understood that, before Pearl Harbor, physicians remaining in practice were to give one-third of the fees from patients of doctors in the services to the secretary of the Society and that fee be given to the physician who is in the service. When the action was taken, it was thought there would be only a small percentage of the now younger men to go but about 40% of the members are in the armed forces. She feels something should be done, although it is hard to trace patients back to their doctor. She would like to suggest to the Society to set up a plan, by assessment—preferably of so much per annum—of each member engaged in private practice at the present time; that the fund be held in reserve and be turned over to these physicians as they return from services or given to them in regular installments. She thinks the assessment would have to be on a voluntary basis and suggests one hundred dollars per anum per practicing physician. Dr. Limper made the motion that this be turned over to the Medical Economics Committee and the committee make a report at the Annual Meeting. Motion seconded by Dr. J. B. Lukins and passed.

The President announced the choice of a Nominating Committee, selected with hospital staff representatives in mind, as follows: Dr. I. T. Fugate, Chairman (St. Anthony and Deaconess); Charles Gaupin (SS. Mary and Elizabeth); Morris Flexner (Norton and Jewish); Rudy Vogt (Baptist); and C. B. Gettelfinger (St. Joseph).

SCIENTIFIC PROGRAM: 8:30 P. M.

Sound Film: "Appendicitis in Children." Jos-

eph Brennemann, M. D., Professor of Pediatrics, University of Southern California Medical School and distributed by Mead Johnson and Company.

Adjourned: 9:15 P. M.

M. F. Beard, Secretary.

Jefferson: The 855 stated meeting of the Jefferson County Medical Society was held Monday evening, December 21, with 41 members and 13 guests present. The meeting was called to order at 8:10 P. M.

The Secretary read the minutes of the previous meeting which, with one correction by the President, stand as read.

Dr. O. O. Miller made a motion that the Society present Miss Walker with a Christmas gift of twenty-five dollars. Motion seconded and passed.

Scientific Program: 8:15 P. M.

Case Reports: "Prolapse of the Signoid due to Carcinoma." M. H. Pulskamp, "Differential Diagnosis of Gastric Ulcer and Gastric Cancer." Frank M. Stites, Jr., "Cancer of the Stomach." L. Wallace Frank. Discussion by Doctors Misch Casper and M. J. Henry.

The Secretary read a late report from the Necrology Committee on the death of Harry L. Read. It was moved and seconded that the resolution be spread upon the minutes and a copy be presented to the family.

M. F. Beard, Secretary.

Madison: The Madison County Medical Society met at the Trachoma Hospital in Richmond November 19. Dr. Floyd discussed the question of gas rationing and the doctor. A paper on "Control of Communicable Disease" was read by J. W. Armstrong. This was followed by presentation of the color film "Immunization Against Infectious Disease" through courtesy of Lederle Laboratories.

J. W. Armstrong, Secretary

Madison: The annual meeting of the Madison County Medical Society was held December 17th in a dinner session at the Blue Room of the Eastern State Teachers College cafeteria. The following were presnt:

Dr. and Mrs. Robert Rice, Dr. and Mrs. Shelby Carr, Dr. and Mrs. J. A. Farris, Dr. and Mrs. A. F. Cornelius, Dr. and Mrs. J. Baker, Dr. and Mrs. F. S. Hutchins, Dr. and Mrs. J. H. Rutledge, Dr. and Mrs. Max Blue, Dr. and Mrs. John Floyd, Dr. and Mrs. J. W. Armstrong, Dr. J. A. Mahaffey, Dr. Hugh Mahaffey, Dr. R. M. Phelps, Dr. Wilson Dodds, Dr. Ruby Paine, Ruth Faust, R. N., Elva Combs, Aileen Overhaultz, Jean Anthony.

Christmas songs were sung by Aileen Overhaultz who was accompanied by Jean Anthony.

Following the dinner the Women's Auxiliary withdrew for a meeting and Dr. Rice called the meeting of the Medical Society to order.

The minutes of the last meeting were read and approved.

Dr. Rice called for nominations for President. Dr. Carr nominated Dr. John Baker and this was seconded by Dr. Cornelius. Dr. Farris moved the nominations be closed and the secretary be instructed to cast an unanimous ballot for Dr. Baker. This was seconded and passed. Dr. Scott T. McGuire was elected as Vice-President and Dr. Max Blue as Secretary-Treasurer. Dr. Robert Rice was elected as delegate to the State meeting and Dr. Dodds as Censor for three years.

This made the officers as follows: President, John Baker, M. D., Berea, Ky.; Vice-President, Scott T. McGuire, M. D., Berea, Ky.; Secretary and Treasurer, Max Blue, M. D., Richmond, Ky.; Delegate to State Medical Association, Robert Rice, M. D., Richmond, Ky.; Board of Censors: Drs. Wilson Dodd, 3 years, J. D. Farris, 2 years, Robert Sory, 1 year.

Dr. Robert Rice moved that meetings alternate between Richmond and Berea, making it possible for local groups to attend each time and as many as possible from the other end of the county. This motion seconded and passed. There was no further business and meeting adjourned.

J. W. Armstrong, Secretary.

McLean: At our regular meeting of McLean County Medical Society held Wednesday, December 23, all officers were re-elected for 1943. In addition the following doctors were elected as our representatives on county board of health, namely: O. V. Brown, Island; A. R. Will, Calhoun, and F. L. Johnson, Livermore.

F. L. Johnson, Secretary.

Nelson: WHEREAS, on December 6, 1942, the Great Physician, saw fit to call home from his labors Dr. R. H. Greenwell of Bardstown, and

WHEREAS: His kindly disposition and conscientious care endeared him to his many patients throughout years of faithful service to the community, and

WHEREAS: His loss is keenly felt by the members of the Nelson County Medical Society whom he served long and well as their secretary and treasurer, we do hereby resolve that an expression of our deepest sympathy be extended to his bereaved family, and that a copy of these resolutions be placed upon the minutes of the Nelson County Medical Society, a copy be sent to the Kentucky Standard, and a copy be sent to the Journal.

Committee:

Keith Crume
Henry Harned
A. D. Steely

Perry: The regular monthly meeting of the Perry County Medical Society was called to order by the President, Dr. Chris S. Jackson, Monday evening, November 9th, in the new City auditorium.

The minutes of the previous meeting were approved as read.

The queston of the program for the annual dinner meeting in December was discussed and the secretary was directed to secure the films, "Pneumonia, Diagnosis and Treatment," and "Sulfonamide Therapy" from Lederle Laboratories for the meeting.

After some discussion regarding The Perry Laboratory doing Selective Service Kahns, Dr. Morgan made a motion which Dr. Boggs seconded that the Society go on record as not approving the Perry Laboratory running Selective Service Kahns for the local boards without some nominal compensation, for this added burden of work, from the army board.

Dr. C. Dana Sydner gave a very interesting and instructive paper, using as his subject, "Traumatic Shock." The subject was covered rather thoroughly by Dr. Sydner and Dr. Jackson opened the discussion with interesting and appropriate remarks. The paper was then discussed at some length by the various members present.

The members present were: Drs. Morgan, Jackson, Collins, Boggs, Gutsche, Knoch, Dana Snyder and Coleman. The meeting adjourned at 9 p. m.

Lewis C. Coleman, Secretary

Rockcastle: The regular meeting of the Rockcastle County Medical Society was held in the office of the County Health Department, December 4th, 1942. The following members were present: Lee Chestnut and Walker Owens, of Mt. Vernon; Robert Webb of Livingston and Nevil M. Garrett, Brodhead.

Dr. Chestnut read a paper on "The New Pneumonia," after which a general discussion of pneumonia was indulged in by members present.

Dr. Garrett gave a report of an unusual obstetric case.

This being the time for the election of officers the following were chosen: Lee Chestnut, President; Walker Owens, Vice President; Robert G. Webb, Secretary.

The next meeting will be held January 8th, at which time Dr. Webb will have a paper on Blood Pressure.

Nevil M. Garrett, M. D., Secretary.

Shelby: Dr. W. E. Morris was host to the Shelby County Medical Society at the Hitching Post in Shelbyville on December 17th. The following members being present: Drs. Dowden, Richeson, Carroll, Alexander, Leslie, Collins, Allen, Skaggs, Nash, Blaydes, Weakley, Morris, McMunn, Beard, Sleadd, Bell, Buckner and Risk.

After a delightful turkey dinner that was furnished by the host, President Alexander called the society to order. The minutes of the previous meeting were read and approved.

Dr. Carroll made a motion, seconded by Dr. Allen, that the Society pay the State dues of the men in the armed services while on active duty. Motion carried.

At this time the meeting was turned over to Dr. Morris who introduced Captain Atkinson of Selective Service Headquarters in Louisville.

Dr. Atkinson spoke on the new ruling of examination of draftees.

A motion was made to adjourn. The next meeting being January 28th, 1943 when Dr. J. T. McMurry will entertain.

C. C. Risk, Secretary.

Taylor: Dr. W. B. Atkinson entered armed forces with rank of Captain in June, stationed at Selective Service Office, Louisville.

M. M. Hall entered armed service September 16th, with rank of First Lieutenant, stationed at Camp Joseph T. Robinson, Arkansas.

Mrs. Mattie Hiestand, wife of Dr. C. V. Hiestand, died in St. Joseph's Hospital October 21st, with probable cancer of lung.

L. S. Hall, Secretary.

Union: The Union County Medico-Dental Society held its third Annual District Meeting Tuesday, November 17, 1942, at Camp Breckinridge, near Morganfield. This year Physicians, Dentists, Pharmacists and Funeral Directors from all parts of Western Kentucky and Evansville, Indiana, were invited to be our guests. We were all invited to be guests at Camp Breckinridge through the courtesy of Colonel H. D. Jackson, Post Surgeon and Lt. Colonel Porter C. Pennington, Commanding Officer of the Camp Hospital.

The meeting started at 3 p. m. with a conducted tour of the large Hospital unit. The guests were all treated to a free meal, buffet style, in the regular Medical Officers' mess at 5:30 p. m. Promptly at 6:30 p. m., as scheduled a scientific session of three symposiums was held. Dr. Gordon B. Carr, president of the Union County Medico-Dental Society, expressed the appreciation of the society for the attendance of well over one hundred (100) guests that were present and to Colonel H. D. Jackson and Lt. Colonel Porter C. Pennington, Lt. T. R. Curran and the other officials of the Camp for being the actual hosts and for the excellent meal which was furnished without charge.

Colonel Jackson introduced Lt. Colonel Pennington, who in turn introduced Captain Rob-

ert D. Frye. A symposium on Appendicitis was discussed by Capt. Albert Miessner and Major Gordon Nelson with Captain Frye as Moderator. Lt. Colonel Pennington introduced Captain Samuel Allentuck, who gave first hand information and a discussion of some of the recent developments in Marihuana Research. Following this there was a symposium on Pneumonia discussed by Captain James R. Woods, Lt. Edward G. Neidballa and Captain Sanders Cohen, who served as Moderator.

Lt. Colonel Porter C. Pennington closed the program with an invitation for us all to be their guests again at some future time. It was impossible to count the total number of guests present. Approximate number was around 150 guests.

Bruce Underwood, Secretary

IN MEMORIAM

William Aubrey Poole, Lexington, Ophthalmologist and Otolaryngologist, specializing in eye surgery, was born September 19, 1881, in Poole, died June 2, 1942, in Lexington.

He was a graduate from the University of St. Louis, 1906, in medicine and took subsequent training in special field at New York Post Graduate, Chicago Eye and Ear College, Washington University and Tulane University.

He was county Health Officer; Captain of U. S. Medical Corps, First World War. Member of the Fayette County Medical Society; Kentucky State Medical; American Medical. Fellow, American Academy of Ophthalmology and Otolaryngology. Diplomate, American Board of Otolaryngology; staff, Good Samaritan Hospital, Lexington.

He was active in civic and fraternal organizations, including: Blue Grass Executives' Club, Lions Club, Masons, Shriners, Knights Templars, American Legion.

He had extensive publications here and abroad. Among last articles: Intermittent Exophthalmos, Surgical Treatment of Trachoma, Gumma of the Orbit, Intra-ocular Pressure as an Index to Treatment, Chronic Suppurative Otitis Media.

FORUM

Randolph Field, 12-24-42

Dear Dr. McCormack:

I am happy to announce to you that I arrived here December 13, 1942 and have been really working since. We get up at 5:15 A. M. and try to be in bed at night by 10:30 o'clock. Our schedule is so full and tough that except for December 24, 25 and January 1st, we will have to go to school every day for 6 weeks. By the time you read this I will have completed two weeks of a 6 weeks course. After that, we are out in a classification center for 6 more weeks, at the end of which time we have completed the course and are termed aviation Medical Examiners. When we have spent one year with our own aviation outfit, spent 50 hours flying in planes, we are recommended to become "Flight Surgeons." I have really had some experiences and have seen more than I ever expected to be able to in a life-time.

I would like to tell you frankly how much I appreciate your efforts and hope you accept my gratitude.

As for this field, you would be surprised and proud to see what goes on here. This is truly one of the country's finest places. As to our class in Aviation Medicine we have 307 doctors in it. Specialists of all branches, and so far I have not seen one who is not saying that they get more medicine here than anywhere they have ever been.

I tried to see Major Harry Andrews of Louisville today. He is over at Kelly Field, Texas, about 25 miles from here. I did trace him down and learned he had just been taken home to San Antonio in an ambulance after a bout with virus pneumonia. I called his wife by phone and learned that he was feeling good, but would be in bed for some time yet.

May I say, thanks, Happy New Year, and only the best to you and yours!

Sincerely,
Lt. Paul E. Harper, M. C.

NEWS ITEMS

During the past year the three 16-mm. silent motion pictures in color, describing certain vitamin deficiency diseases, which were made available by Eli Lilly and Company, Indianapolis, for showing before medical groups under sponsorship of a physician, have been in continuous demand. One film deals with deficiency of thiamine chloride (beriberi), another with nicotinic acid deficiency (pellagra), and the third with ariboflavinosis. To meet increasingly frequent demands for the films, additional new prints have been placed in circulation and are now ready for loan. The major part of all films concerns the clinical picture presented by the patient with reference to treatment by diet and specific medication. They do not contain advertising of any description, nor is the name of Eli Lilly and Company mentioned.

The films were made at the Nutrition Clinic of the University of Cincinnati at the Hillman Hospital, Birmingham, Alabama, where studies were initiated in 1935, under the joint auspices of the Departmen. of Internal Medicine of the University of Cincinnati and the University Hospitals of Cleveland. Subsequently, these investigations became a co-operative project be-

tween the Departments of Medicine of the University of Cincinnati and the University of Alabama, and the Department of Preventive Medicine and Public Health of the University of Texas.

John W. Wells, 72, a practicing physician for forty-eight years, died December 17th at his home in Magnolia. A native of Fairfield, he began practice there in 1894 coming to Magnolia in 1915. Dr. Wells was graduated from the University of Louisville School of Medicine, Georgetown College and the Bardstown Institute.

Dr. J. L. Anderson of Manchester, Kentucky, writes that he has an X-ray outfit in excellent condition that he would like to dispose of. We are presenting this to our readers because such outfits are so difficult to secure now and we suggest that any of you who are interested correspond with Dr. Anderson immediately.

We are sorry to say that Dr. Anderson's ill health has made it necessary for him to so limit his practice that he does not longer need his X-ray equipment.

The annual meeting of the Society of American Bacteriologists scheduled for December 28, 29, and 30, in Columbus, Ohio, was cancelled at the request of the Office of Defense Transportation and the Science Committee of the National Resources Planning Board. The request for cancellation of the meeting was received by the Secretary-Treasurer on the afternoon of November 27. Dr. S. A. Waksman, President of the Society, and Dr. N. P. Hudson, Chairman of the Program Committee, were consulted immediately, and the advice of the National Research Council was secured through Dr. E. B. Fred. It was the unanimous opinion of those consulted that the Society of American Bacteriologists should comply with the request for cancellation of the meeting.

The Board of Regents of the American College of Physicians has announced the cancellation of their 1943 Annual Session, which was scheduled to be held in Philadelphia, April 13-16, 1943. This action was taken after thoughtful consideration of all factors involved, including an intimation from the Secretary of War and the Office of Transportation that larger national medical groups should not plan meetings at the time set; a growing difficulty in getting speakers and clinicians of top rank to maintain the usual standards of the program; prospect of greatly reduced attendance, because civilian doctors are faced with too great a burden of teaching and practice already; a decreasing active membership, due to approximately 25% of all doctors being called to active military service. President James E. Paullin announced, however, that all other activities of the College would be pursued with even greater zeal, and that the College would especially promote regional meetings over the country and organize postgraduate seminars in the various military hospitals for doctors in the Armed forces.

Dr. M. W. Haws, former Secretary of the Fulton County Medical Society, died July 30 in Fulton.

The ninety-fourth annual session of the Indiana State Medical Association will be held in Indianapolis on Tuesday, Wednesday and Thursday, September 28, 29 and 30, 1943.

BOOK REVIEWS

A TEXT BOOK OF GYNECOLOGY: By Arthur Hale Curtis. M. D., Professor and Chairman of the Department of Obstetrics and Gynecology, Northwestern University Medical School; Chief of the Gynecological Service, Passavant Memorial Hospital, Chicago. Fourth Edition, Reset. 723 pages with 401 illustrations. Philadelphia and London: W. B. Saunders Company, 1942. Price $8.00.

The new fourth edition follows the most complete and comprehensive revision and is a useful and practical guide to this most important subject.

The chapter on pelvic and perineal anatomy has been completely rewritten and includes 50 magnificent new and original drawings by Tom Jones. This is undoubtedly one of the finest presentations of its kind to be had in the English language. The discussions of adolescence and the menopause have been rewritten and enlarged. The material on the endocrines has been almost entirely rewritten, including the new estrogenic products and their commercial sources. The chapter on gonorrhea has been greatly improved and now contains the latest uses of sulfanilamide therapy. The discussion of puerperal infection includes much important new information, and all the chapters on tumors have been extensively revised, in fact largely rewritten. In addition to the latest operative technics, Dr. Curtis also thoroughly takes up the use of the sulfonamides in gynecologic surgery. Throughout, greater emphasis has been placed on pathology, diagnosis and medical treatment.

TOXICITY OF INDUSTRIAL ORGANIC SOLVENTS: Report No. 80 Medical Research Council. Industrial Health Research Board. First American Edition. 1938. Chemical Publishing Company, of N. Y., Inc. (By permission of His Majesty's Stationary Office.)

This report includes the summary of the published work on toxicity of industrial or-

ganic solvents compiled by Ethel Browning, M. D. under the direction of the council and is the first American edition of the British publication. It is complete up to 1938 with bibliographies on each organic solvent discovered which cover the Hydrocarbons, Chloro Compounds, Alcohols, Esters, Cyclohexane Derivatives, Ketones and the Glycol Groups, and other organic solvents.

The references listed are American, British and European prior to 1938.

This report is extremely important as a reference for those physicians having industrial practice.

COLLECTED PAPERS of THE MAYO CLINIC and THE MAYO FOUNDATION: Edited by Richard M. Hewitt, B. A., M. A., M. D. Harry L. Day, Ph. B., M. D.; James R. Eckman, A. B.; A. B. Nevling, M D.; John R. Miner, B. A., Sc. D., and M. Katherine Smith, B. A. Volume XXXII—1940. 1190 pages with 210 illustrations Philadelphia and London: W. B. Saunders Company, 1941. Price $11.50.

The title speaks for itself, no more need be added than that a new Mayo Clinic has been given to the public. In compiling these annual volumes the writers have assembled material that is of interest to the general practitioner, diagnostician and general surgeon. There has been added a new section on "Military Medicine," the material for this chapter has been taken from any and every available source. All the contributors and their titles are listed on the front page of the volume.

THE SCHERING REVIEW OF MODERN SEX ENDOCRINOLOGY comprising three volumes as follows; Volume, 1, Female Follicular Hormone Therapy, 58 pages, Volume 2, Corpus Luteum Hormone Therapy, 47 pages, Volume 3, Male Sex Hormone Therapy, 52 pages. Prepared and published by the Schering Medical Research Division, Schering Corporation, Bloomfield, New Jersey. Free copies to the medical profession.

In three small valuable volumes of fifty-odd pages apiece, the Schering Medical Research Division has thoroughly covered the entire subject of the male sex hormone and the two female hormones. Though unassuming, these "Clinical Guides" are actually excellent reference works, presenting the history, physiology and therapeutics of the respective hormones and their present-day therapeutic forms: testosterone, methyl testosterone, testosterone propionate; a-estradiol, a-estradiol benzoate and dipropionate; progesterone and anhydrohydroxy-progesterone.

Up to the present time, no one has undertaken to furnish this information in such a comprehensive and responsible manner.

WAR GASES, THEIR IDENTIFICATION AND DECONTAMINATION, by Morris B. Jacobs, Ph. D. Food, Drug and Insecticide Admin. U. S. Dept. of Agr. 1927, Chemist Department of Health, City of New York, 1928. Formerly Lt. U. S. Chemical Warfare Service Reserve. Interscience Publishers, Inc., 215 Fourth Ave, New York. Price $3.00.

The subject matter of this book has been obtained from the most recent literature, particularly with respect to analytical procedures. The opinions expressed are those of the author and he does not presume to give official views of any branch of the Government. It is a very timely book dealing with the classification, physical characteristics and physiological responses of war gases, chemical agents, contaminations, decontaminations and other subjects.

EMERGENCY CARE, by Marie A. Wooders, B. S., R. N., Principal School of Nursing Hackensack Hospital, Hackensack, New Jersey and Donald A. Curtis, M. D., Lieut. Col., Medical Reserve. 201 illustrations. F. A. Davis Company, Philadelphia, Publishers.

This is a manual for national and civil emergencies which will prove of great assistance to civilian nurses in their professional duties. There are special chapters dealing with an educational program for first aid and emergency nursing.

Not only will this book appeal to nurses and doctors but should be in every home. Simple procedures as avoiding household accidents as slipping surface, burns from matches, falls, tripping are described and illustrated in such a manner that its contents can be easily understood.

ADVANCE IN INTERNAL MEDICINE: Edited by J. Murray Steele, M. D., Welfare Hospital, New York, University Division. Associate editors William Dock, M. D., Cornell University, Tinsley R. Harrison, M. D., Wake Forest College, Chester S. Keffer, M. D. Massachusetts Memorial Hospital, Robert F. Loeb, M. D., Columbia, W. T. Longcope, M. D. Johns Hopkins Hospital, George R. Minot, Boston City Hospital, I. Snapper, M. D., Peeping, China. Interscience Publishers, Inc., 215 Fourth Ave., New York. Price $4.50.

This volume is the result of putting into concrete form a summary of all the latest advances in medicine. Each subject is discussed by authorities in their field of work in a simple and broad style, the background of each essay is intended to furnish an understanding of the problems whose partial solution represents recent advancement in medicine.

These condensed descriptions of interesting diseases, many occuring in every day practice, add value to the book.



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Lexington, Kentucky

Dr. George S. Sprague, the psychiatrist in charge of the New York Hospital's psychiatric department for men, in White Plains, New York, for the past ten years, announces that he has acquired the ownership and superintendency of High Oaks Sanatorium from his father, Dr. Geo. P. Sprague. This institution established for the treatment of mental or nervous illnesses and liquor or drug addictions, will continue to operate as a reliable, scientific, modern hospital. It meets the requirements of personal comfort in homelike surroundings, while providing also the various treatment measures which may be indicated for each patient individually.

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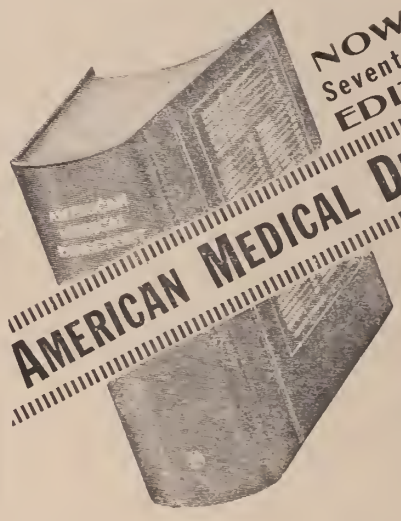
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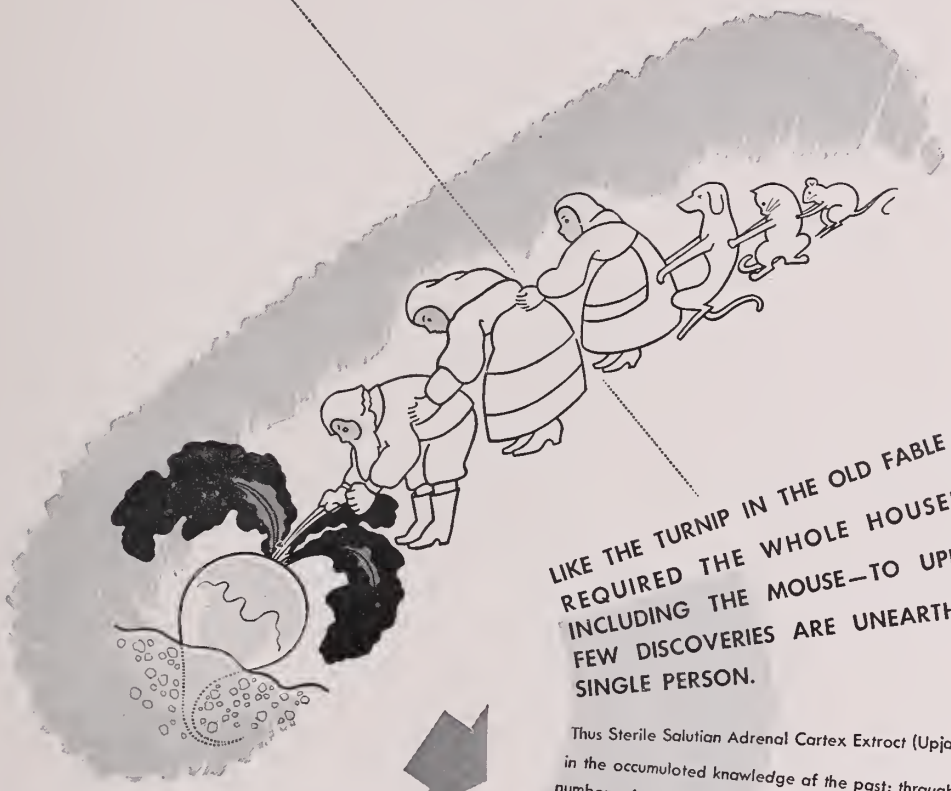
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OF MEDICINE
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[1]KOJIS, F. G.: Am. J. Dis. Child. 64:93 (July), 1942; 64:143 (Aug.) 1942.
[2]TOP, F. H., and YOUNG, D. C.: J.A.M.A. 117:2056 (Dec. 13) 1941.
[3]PALMER, L.: Kentucky M. J. 40:254 (July) 1942.
[4]MELNICK, T.: Arch. Pediat. 59:90 (Feb.) 1942.
[5]HOYNE, A. L.: Illinois M. J. 81:12 (Jan.) 1942.
[6]THOMPSON, C. G.: Connecticut M. J. 5:736 (Oct.) 1941.

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Carroll	H. Carl Boylen	Carrollton	
Carter	Don E. Wilder	Grayson	February 9
Casey	Wm. J. Sweeney	Liberty	February 25
Christian	F. T. Harned	Hopkinsville	February 16
Clark	H. R. Henry	Winchester	February 19
Clay	L. H. Wagers	Manchester	February 9
Clinton	S. F. Stephenson	Albany	February 20
Crittenden	C. G. Moreland	Marion	February 8
Cumberland	W. F. Owsley	Burkesville	February 3
Daviess	T. H. Milton	Owensboro	February 9 & 23
Elliott			
Estill	Virginia Wallace	Irvine	February 10
Fayette	Douglas E. Scott	Lexington	February 9
Fleming	Roy Orsburn	Flemingsburg	February 10
Floyd	Robert Sirkle	Weeksbury	February 24
Franklin	B. B. Baughman	Frankfort	February 4
Fulton			February 10
Gallatin	J. M. Stallard	Sparta	February 18
Garrard	J. E. Edwards	Lancaster	February 18
Grant	Wallace Byrd	Williamstown	February 17
Graves	H. H. Hunt	Mayfield	February 2
Grayson	E. B. Deweese	Caneyville	
Green	S. J. Simmons	Greensburg	February 1
Greenup	Virgil Skaggs	Russell	February 12
Hancock	F. M. Griffin	Hawesville	February 1
Hardin	D. E. McClure	Elizabethtown	February 11
Harlan	W. R. Parks	Harlan	February 20
Harrison	W. B. Moore	Cynthiana	February 1
Hart	Maher Speevack	Munfordville	February 2
Henderson			February 8 & 22
Henry	Owen Carroll	New Castle	February 11
Hickman	H. E. Titsworth	Clinton	February 4
Hopkins	Wm. H. Garnier	Madisonville	February 11
Jackson			February 6
Jefferson	Marion F. Beard	Louisville	February 1 & 15
Jessamine	J. A. VanArsdall	Nicholasville	February 18
Johnson	A. D. Slone	Paintsville	February 22
Knott			
Knox	T. R. Davies	Barbourville	February 18
Larue			
Laurel	Oscar D. Brock	London	February 10
Lawrence	L. S. Hayes	Louisa	February 15
Lee	A. B. Hoskins	Beattyville	February 13
Leslie	John H. Kooser, Acting Sec.	Hyden	
Letcher	Bert C. Bach	Whitesburg	February 23
Lewis	Elwood Esham	Vanceburg	February 15
Lincoln	Lewis J. Jones	Hustonville	February 19
Livingston	T. L. Radcliffe	Smithland	
Logan	E. M. Thompson	Russellville	
Lyon	H. H. Woodson	Eddyville	February 2
McCracken	Leon Higdon	Paducah	February 24
McCreary	R. M. Smith	Stearns	February 1
McLean	F. L. Johnson	Livermore	February 11
Madison	Max E. Blue	Richmond	February 18
Magoffin	Lloyd M. Hall	Salyersvillt	
Marion	Nelson D. Widmer	Lebanon	February 23
Marshall	S. L. Henson	Benton	February 17

COUNTY	SECRETARY	RESIDENCE	DATE
Martin			
Mason	C. W. Christine	Maysville	February 10
Meade	S. H. Stith	Brandenburg	February 25
Menifee	E. T. Riley	Frenchburg	
Mercer	J. Tom Price	Harrodsburg	February 9
Metcalfe	E. S. Dunham	Edmonton	
Monroe	Geo. E. Bushong	Tompkinsville	
Montgomery	D. H. Bush	Mt. Sterling	February 9
Morgan			
Muhlenberg	E. L. Gates	Greenville	February 9
Nelson	Keith Crume	Bardstown	
Nicholas	T. P. Scott	Carlisle	February 15
Ohio	Oscar Allen	McHenry	February 3
Oldham			February 2
Owen	K. S. McBee	Owenton	February 4
Owsley	W. H. Gibson	Booneville	February 1
Perry	Lewis C. Coleman	Hazard	February 8
Pike	S. B. Casebolt	Pikeville	February 4
Powell	I. W. Johnson	Stanton	February 1
Pulaski	Robert G. Richardson	Somerset	February 11
Robertson	Logan T. Lanham	Mt. Olivet	
Rockcastle	Robert G. Webb	Livingston	February 5
Rowan	A. W. Adkins	Morehead	February 8
Russell	J. R. Popplewell	Jamestown	February 8
Scott	F. W. Wilt	Georgetown	February 4
Shelby	C. C. Risk	Shelbyville	February 18
Simpson	L. R. Wilson	Franklin	February 9
Spencer	M. H. Skaggs	Taylorsville	
Taylor	L. S. Hall	Campbellsville	February 4
Todd	B. E. Boone, Jr.	Elkton	February 3
Trigg	Elias Futrell	Cadiz	
Trimble			
Union	E. Bruce Underwood	Morganfield	February 2
Warren-Edmonson			February 10
Washington	J. H. Hopper	Willisburg	February 17
Wayne	Frank L. Duncan	Monticello	
Webster	C. M. Smith	Dixon	February 26
Whitley	C. A. Moss	Williamsburg	
Wolfe	John L. Cox	Campton	February 1
Woodford	George H. Gregory	Versailles	February 4

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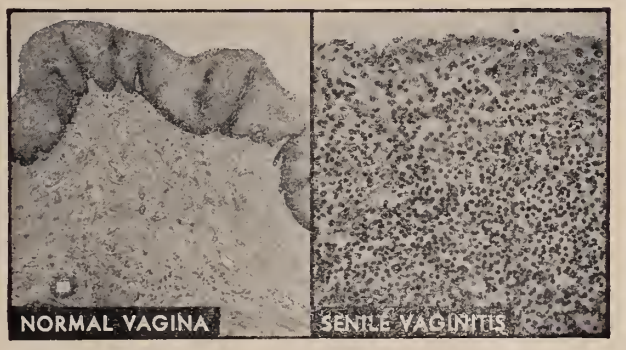
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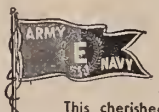
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KENTUCKY MEDICAL JOURNAL

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

VOL. 41, NO. 2 BOWLING GREEN, KY. FEBRUARY, 1943

DECIDED

The final decision in the Appeal by the American Medical Association and the Medical Society of the District of Columbia from the verdict of the Federal District Court in Washington finding them guilty of a conspiracy against the Group Health Association has been handed down by the Supreme Court of the United States and was published in full in a recent issue of the *Journal of the American Medical Association*. It occasioned no surprise to anyone who had read the evidence and the pleadings and the previous decisions of the United States Court of Appeals of the District of Columbia that the decisions of the lower courts finding the two Medical Organizations guilty of conspiracy was upheld. This case is, therefore, *res adjudicata*.

No American physician need be ashamed of the opposition of organized medicine to the methods, plans and procedures of the Group Health Association. It is important, however, that we learn from this case that our opposition to the type of group medicine herein exemplified should not again be handled as ineptly as in this case. The evidence clearly showed that those who represented organized medicine actively in what is now definitely a conspiracy, used devious ways and unjustifiable methods in their procedure. The important lesson for us to learn is that we must keep our house in order, we must be represented in controversial matters by those who are willing to take responsibility and explain to the public or to the courts why they did so. We are certainly to be congratulated that the Supreme Court decided that organized medicine is not a trade union and we feel very definitely that our attorneys should apologize to the medical profession for having claimed that we do constitute a trade union. One individual emerges from the entire suit with a noteworthy credit score. Dr. Olin West, the Secretary and General Manager of the Association, stated definitely on the stand that if opposition to the methods of Group Health Association constituted a crime, he was guilty. Dr. West's attitude was unquestionably correct and if all our witnesses could have been as clear and frank in their statements as he was and could have been as guiltless of conspiracy as he was we would have won instead of lost this case.

This decision should introduce no fear complex into American medicine that will deflect it from its course in demanding that our profession shall stand firmly in favor of honorable conduct in the practice of the most important profession which serves humanity. We should continue to fight in Legislatures and before the Court of Public Opinion for those principles which make of the practice of medicine the most honorable calling amongst men. It should not lessen our opposition to quackery or to any quantitative system of practice that will reduce the safeguards that protect the public from wholesale exploitation by either groups, corporations or individuals. This Decision should intensify ten-fold the opposition of the profession to any form of regimentation of medical service. It should also close the ranks of the profession so that we are united in our opposition to any form of controlled medical care, whether by Government, by corporations or by mutual societies. Chain store methods are not applicable in the practice of medicine. It outrages every principle of individual liberty and sound reasoning to think of walking into a public doctor's shop and receiving one's medical care as impersonally and as collectively as one receives his letters at the Postoffice, or his tax bill. It is the duty of the individual members of the profession to discuss the principles upon which it is founded, and to which it adheres, with the leaders of public opinion so they will know and understand our sole purpose is to prevent and ameliorate and cure disease. To this end it is essential that we reform that element in our profession who are attempting to reduce it to commercialism. Medicine is a profession. It can be maintained as such only so long as we are guided by the service rather than the profit motive.

Having been guilty of conspiracy in this particular activity, let us be sure that our future course will be guided by statesmen and that we will continue to control the House of Medicine for the benefit of the people whom we serve so that they will continue to understand us and to have confidence in us.

CHARTING OUR COURSE

Business houses, at the close of the year, usually close their books, make up their balance sheets and ask themselves, "Did we lose money during the year or did we show a profit?" The wise business man plans his work for the coming year in the light of the facts revealed by his balance sheet.

It is wise, at the beginning of this New Year, to take a look at the facts concerning tuberculosis in Kentucky. The death rate for the preceding year was a little lower than that of the previous year.

Now that the Draft Boards are X-raying practically all draftees and since they are rejecting all persons whose chests are marked by tuberculosis, we are confronted with a new problem. These cases are referred to the State Department of Health, and they are coming in such large numbers that it is rather alarming to note how many men, many of them apparently in good health, who are unfit to serve their nation in this time of great stress.

Of course, many of these rejectees are not clinically ill, but they are all unfit for service and many of them are spreaders of disease. More than 500 names of men rejected because of tuberculosis came to our desk in the last half of '42. Through these we have found many unknown cases of active tuberculosis. In following them up, we have been able to locate many unrecognized sources of infection, in the homes and circles of friends, from which those rejectees have come. We are calling this to the attention of the practitioners and health workers of Kentucky because, at this particular time, it is of vital importance that every physician be tuberculosis conscious and that he should recognize the fact that all patients are potential tuberculosis cases until they are proven, to be free from this disease.

We have failed to do our best in the past, and that is why we have this heavy crop of tuberculosis showing up now. Let us see to it that from now on everything possible is done to protect everyone from the ravages of tuberculosis, and, in so doing, we will help win the victory and shorten the duration of the bitter struggle that lies ahead. It makes no difference whether a soldier is killed by a bullet or knocked out by tuberculosis, as far as the present struggle is concerned, but a soldier kept out of the ranks because he has tuberculosis is not only a complete loss to our Army but is a potential spreader of disease, and a menace to the health of our nation.

The physicians of Kentucky are in a position to strike a death blow against tuberculosis. May we not fail our people in this fight against all our enemies! Let us be on guard for 1943.

DR. PELOUZE TO MEET WITH COUNTY SOCIETIES IN MAY

During the month of May the medical profession of Kentucky will have the privilege of a visit from one of America's foremost authorities on the management and treatment of gonorrhea. Dr. Percy S. Pelouze, formerly Assistant Professor of Urology, University of Pennsylvania and now full time consultant to the U. S. Public Health Service, has been loaned to the State for this entire month.

Dr. Pelouze will be available for scientific sessions of the various District and County Societies. He will also talk to various groups of county health officers and nurses engaged in the control of venereal disease in their respective districts.

Many Kentucky physicians are familiar with Dr. Pelouze through his excellent book "Gonorrhea in the Male and Female." Because of the important changes in the treatment and management of gonorrhea that have followed, in recent years, the introduction of the sulfonamide drugs, it is particularly timely that our profession should have this opportunity to hear this authority. It is further timely that he should come when intensified efforts are being directed at the control of venereal diseases as a means of conserving manpower for the war effort. Every physician should make a special effort to attend one of these meetings and take advantage of this opportunity to get the latest authoritative information on the treatment and management of this crippling disease.

Since there still remain a few open dates in Dr. Pelouze's itinerary, District and County Societies not yet having full programs for their May meeting, may arrange to have Dr. Pelouze by writing Editor of the Journal.

ORIGINAL ARTICLES

FLUOROGRAPH IN A CASE FINDING PROGRAM

T. A. Woodson, M. D.
Louisville

There is nothing new in the principle of the fluorograph for in 1911 Caldwell developed a satisfactory method of the fluorograph. He pointed out its advantages and predicted that the fluorograph would attain practical value in the future when faster lenses and films were developed.

There have been many workers in this field. In 1936 deAbreu of Brazil started the first mass X-ray survey with the 35 mm. fluorograph. Lindberg and Hirsh, in this country, soon followed him in this work.

The Navy in 1939 started using the 35 mm. miniature fluorograph and have seven units which are used to screen out the tuberculous among their recruits in a rapid, inexpensive, and efficient manner. The U. S. Public Health Service has eight 35 mm. photo-fluorograph units in the field which are being used to examine the U. S. Coast Guards, civilians in the war industries, civilians and war workers in congested military areas.

The University Hospital at Ann Arbor, Michigan has installed a 35 mm. X-Ray machine and every patient admitted to the hospital gets a 35 mm. picture. 10% of the admissions showed pulmonary lesions.

Dr. Oscar O. Miller started using the 35 mm. fluorograph in the Waverley Hills Tuberculosis Clinic in 1940, and in December 1941 started using the stereo fluorograph. Splendid work has been done by him.

It should be clearly understood that the 35 mm. picture is not used for fine diagnostic work. When there is a pulmonary lesion or a questionable area present a 11x14 celluloid film is taken for confirmation and accurate diagnosis. The value of the 35 mm. fluorograph in the tuberculosis case finding programs may be summed up as a satisfactory method for Mass-X-Ray Survey. 200 - 500 films a day can be taken. It is inexpensive as the film cost is about 1 cent per developed film.

It is estimated by Hirsh and other workers that less than 1% of significant tuberculosis will be missed by using the 35 mm. fluorograph. Therefore all advanced cases can be found and only a few of the early cases will be missed.

If the eradication of tuberculosis is to become more than a hope, serious consideration must be given to that population group where the death rate from tuberculosis is the highest. We believe the 35 mm. fluorograph has a practical value and as Dr. Hirsh has said, "The record is sufficiently clear to screen out the abnormal lung from the normal lung."

Read before the Jefferson County Medical Society, September 21, 1942.

THE PLANIGRAPH IN PULMONARY LESIONS

E. R. Gernert, M. D.
Louisville

Planigraphy is sectional X-Raying of a given part of the body. Several methods for securing an X-Ray of a designated body section have been published under various names, such as:—Planigraphy, stratigraph, tomograph, laminagraph and X-Ray focusing machine. In all these methods, various motions are imparted to the tube, plate, or patient, so that the designated plane is in focus and is sharply defined in the X-Ray film, the other planes being eliminated from the picture by blurring.

Development of the planigraph began in 1921. It was not until 1934 that it began to be used for clinical and pathological purposes.

For successful planigraphy the following are essential:

1. The effect of blurring of large distributing shadows proximal to the layer to be X-Rayed.
2. Shortness of exposure.
3. Obtaining sharp outline.
4. Variability of the focus-body layer distance.

Planigraphy enables the visualization of lesions not demonstrable by conventional roentgen methods.

A layer of tissue at any predetermined depth in the body is recorded on a roentgenogram to the exclusion of the shadows of structure above or below the layer being examined.

Practical application of the method is made especially of the respiratory tract, to demonstrate disease processes that are not otherwise satisfactorily visualized, because of interferring shadows such as are produced by the spine, rib cage, pleural fluid and lung consolidation. On the basis of many serial exposures, the pul-

Read before the Jefferson County Medical Society, September 21, 1942.

monary vessels and their divisions and the bronchi and their related pathological conditions can be made apparent, cavities defined and localized, and the extension of pathological processes can be estimated.

Roentgen film study of the soft tissues of the neck was limited to lateral projections prior to the advent of planigraphy, but now, by the use of this method, it is possible to visualize the larynx and adjacent structure by anteroposterior roentgenograms. Planigraphy is especially valuable to lateralize a laryngeal tumor and demonstrate its size, extent and senotic effect it produces on the airway. In the subglottic region it is superior to other methods of examination, including endoscopy, for evaluation of the size and extent of a neoplasm.

Constriction and invasion of the lateral tracheal walls that result from conditions such as carcinoma of the thyroid and Hodgkin's disease are clearly demonstrated by anteroposterior planigraphy, and in the chest this procedure is also the only satisfactory way to show side-to-side narrowing of the trachea, since the spine and mediastinal structures interfere when visualization is attempted using conventional roentgen-ray methods. If the thoracic trachea is markedly narrowed by intrinsic disease, lateral planigraphy is often more informative than the anteroposterior planigrams, because it is difficult to obtain true anteroposterior planigraphic sections of this portion of the air way.

Foreign bodies in the neck and chest that are not of sufficient density to be visualized by anteroposterior, posteroanterior and lateral roentgenograms, are readily localized by planigraphy. In the neck the interference by the spine shadow with film visualization of a foreign body in relation to the lateral margins of the air or food passages is obviated by anteroposterior planigraphy, and in this region the method is especially valuable if the foreign body is partially or largely extraluminal, and therefore out of range of endoscopic vision. Removal of the foreign body is possible immediately after localization instead of the customary twenty-four hour delay, that is necessary when an opaque mixture is used for lateralization.

In the chest the method is useful to determine the position of a foreign body when it is visualized only by ventral or dorsal projections but not by lateral roentgenograms. This may occur when the foreign body is surrounded by either atelectatic or consolidated lung tissue. Under these circumstances it is possible to localize the foreign body in relation to the main bronchial divisions and the anterior and posterior aspects of the lung since the depth of the planigraphic section that contains the foreign body is known. Bronchoscopic removal is thus made possible.

Tumors of the chest that are not demonstrated by conventional X-Rays on account of atelectasis or consolidation of the lung adjacent to the tumor, or perhaps a layer of fluid in the pleural cavity, are delineated by body section roentgenography, because only the layer of tissue that contains the tumor is recorded and interfering superimposed shadows are eliminated. In addition to actual visualization of the tumor, its depth is determined by anteroposterior planigraphy and thus adequate localization is obtained for aspiration biopsy. Bronchial stenosis or occlusion due to tumor is made apparent by planigraphy if the bronchus is of appreciable size.

Planigraphy is especially valuable to demonstrate lung cavities, either tuberculous or non-tuberculous, that are not visualized by conventional roentgen studies. For this reason the method is very useful in the management of pulmonary tuberculosis when cavitation is suspected because of the clinical and laboratory findings, and yet there is no evidence of lung cavity by ordinary roentgen-ray examination.

Ordinary roentgenograms give little information as to the condition of the lung that is collapsed due to some form of collapse therapy, because the compressed lung tissue and the overlying pleura are so dense that a homogeneous shadow is produced, but the underlying tissue and any residual cavitation in it are demonstrated by planigraphy.

The following slides demonstrate cavities on planigraphic sections, which were not visualized by conventional roentgenograms, or left the individual doubtful as to whether or not cavitation was present.

DISCUSSION

Benjamin L. Brock: If this country undergoes an experience comparable to that in England and other warring countries, we may find within a few years that the incidence of and death rate from pulmonary tuberculosis has definitely increased. In order to prevent this

and in order to lower the present high death rate from tuberculosis in Louisville and Jefferson County we must all increase our efforts to control the disease. At the present time the health department is endeavoring to prepare a control program. It has already gone far toward the accomplishment of this end by furnishing additional negro beds at Waverly Hills Sanatorium. We now wish to intensify the Case Finding Program in Jefferson County and would appreciate any suggestions and help which you may give us.

The Tuberculosis Clinic, 235 East Chestnut Street, wishes to extend to the physicians of Louisville and Jefferson County a cordial invitation to use its facilities on a consultation basis for the diagnosis of their suspected cases. Individuals with symptoms of pulmonary tuberculosis and contacts of known cases are usually first seen by the private physician and it is among these referred patients that the greatest percentage of active tuberculosis is found. The Clinic is for your use and we wish you would use it freely. Through your cooperation and help we may expect to see a lowering of the mortality rate from tuberculosis in this community.

Hugh R. Leavell: I should like to pay tribute to my good friend, Dr. Miller, in developing these two procedures. They are interesting not only from the diagnostic standpoint interpreting in great detail the individual patient's lesion, but in cutting the cost down to enable mass production for large numbers. From the public health standpoint, that is of very great importance. I do want to say how grateful all of us are in the community to Dr. Miller for developing this work to such a great extent here in Louisville.

O. O. Miller: There is no special credit due us in regard to the development of the fluorograph. DeBreau had an excellent paper in the September issue of Radiology 1939 in regard to the thirty millimeter micro film. He has been a pioneer in this field.

We realize the need of such equipment in our work as this procedure permits one to take any number of chest pictures at a minimum cost. We presented the problem to Mr. William Jordan, engineer at Waverly Hills Sanatorium, who built the machine so that it would take 100 feet of film. He worked out the lens distance and the type of film to be used. In fact, he overcame all the technical difficulties. The mechanism for moving the film is motor driven.

We can take four stereo chests on a foot of film or eight single pictures. The stereoscopic micro film has overcome most of the criticisms levelled at the single film as minimal lesions were likely to be missed previously. This is an infallible method of mass case finding.

When it comes to the planigraph I want to agree with Dr. Shiflett. I have seen some of his beautiful pictures. One definite disadvantage, however, of the laminograph is that the tube is at a fluoroscopic distance and it is necessary for the patient to lie on his back while the sections are being made, which, of course, gives one AP views. The advantage with a planigraph is that the patient is at sixty inch target distance and the tube moves through an arc of over seventy-two inches. It has a sine motion which imparts a lateral motion of the tube which is advantageous.

I believe that the planigraph, as far as the chest is concerned, is superior to other methods of body section radiology. In sectioning the chest, we usually begin at seven to eight centimeters from the front and section at one centimeter depths to within four to five centimeters of the back, using a spot film over the area, after the patient has been previously fluoroscoped and x-rayed and the lesion is hence localized for investigation.

I would like to emphasize the great value of the fluoroscope in examination of the chest and as a preliminary procedure to making the roentgenograms as it clearly indicates the size and location of the lesion and gives information as to whether steroscopic PA films are indicated, or whether the flat PA film and lateral film will give the maximum information.

Isham Kimbell: This is intensely interesting to me from a diagnostic standpoint and, more especially, the standpoint of prognosis. Pulmonary tuberculosis has much interest for the psychiatrist, especially for those of us who are engaged in the administration of large hospitals for the mentally sick citizens of the state. I wish you gentlemen could sometime come and go with me through some of the wards of Central State Hospital and see the importance of early diagnosis of pulmonary tuberculosis. I wish you could see some of the patients who have been sent in to us. I have seen patients admitted with far advanced active bilateral pulmonary tuberculosis in which x-ray of the chest—an ordinary flat plate—did show unmistakable roentgenological signs diagnostic of pulmonary tuberculosis. You can understand what it means to have a far advanced open case associated with a large group of regressed mental patients.

Recently, due to the fact that we have lost five or six doctors because of the emergency I had taken over temporarily for about two weeks the management of the ward for the criminally insane. Now, you gentlemen know, of course, that the supervision and treatment

of a tuberculosis patient is quite a serious undertaking. You do know as well as I, that the psychotic individual, the mentally sick individual, is very prone to develop pulmonary tuberculosis and that the examination of the chests of these psychotic patients is extremely difficult. But, I did think that I could do a little something about that particular ward. So I got a stethoscope, went into a quiet room and began to make some daily examinations. I found some evidence of disease of the lungs which later was found to be tuberculosis of the lungs. I found four patients suffering with active tuberculosis. You cannot get these patients to cooperate in breathing, coughing, etc.; you can't get sputum. To those of us engaged in this work, any improvements in X-ray technic are of intense interest. The tuberculous psychotic patient is very difficult to treat and control and any improvement in technique and procedure is of vital interest to each of us. The thing of paramount importance which assists us most is what the public health service and officials are doing in detecting and isolating these individuals before they get to the state hospital.

E. L. Shiflett: We have had a laminagraph in the office since April, 1939. I believe that the laminagraph is superior to the other methods of body sectioning. There is less undesirable motion, there is no striation, it seems that the thinness of the sections can be controlled better, and in addition to the longitudinal motion one has the circular, or spinal motion, the choice of combination depending upon the part being sectioned.

The advantage of sectioning in the demonstration of suspected lung cavities hidden behind thickened pleura and in infiltrated tissue, has been definitely shown to you by Dr. Gernert. It is of equal importance in establishing a negative diagnosis of cavity, abscess, and tumor, which might be suspected from the general appearance of the usual X-ray of the acutely or chronically ill patient. I wish to emphasize that body sectioning is as applicable and as valuable in the study of other parts as it is in chest diagnosis.

The laminagram is far superior to the conventional X-ray of sinuses, and particularly of the posterior sinuses. The anatomical relationship of the nasal structures to the sinuses, and the inter-relationship of the sinuses themselves, are beautifully demonstrated without the superimposition of shadows. We have demonstrated posterior sinus disease with the laminagraph when the conventional films were negative. Polyps and thickened mucous membrane are demonstrated with such clarity that lipiodol injection is often unnecessary. Many cases of visual disturbances or retrobulbar neuritis have been explained by finding posterior sinusitis which was inadequately, or not demonstrated by the conventional X-ray.

The laminagraph permits accurate study of the fossae of the skull. Lesions involving the sphenoid bone, clivus, sella turcica, and sphenoidal fissures, such as meningiomas, pituitary adenomas, internal carotid aneurysms, and inflammatory processes are shown quite positively. Structural defects about the foramen magnum; the alanto-occipital joints, the odontoid process, posterior cervical arch and upper cervical spine, can now be minutely studied by X-ray.

We have sectioned both the dorsal and lumbar spine to advantage, particularly in some cases claiming compensation, or in lesions about the pedicles and lamina. Adequate visualization of the sternoclavicular joint, costosternal junction, and the sternum, is no longer a problem because of convincing laminagrams easily obtained. It is of help in what at first appears to be simple problems, such as chronic osteomyelitis, often revealing sequestra when the other methods have failed; showing malunion or incomplete union of small bones beneath thin shells of callus, and thus accounting for persistent pain in cases of apparently completely healed fractures. This is of great significance in compensation cases. The temporomandibular joint, normal and pathologic, can now be studied without having to speculate on the influence of trying angles. The field of body sectioning is gradually being enlarged and we have not approached the end of possibilities, and I think much can be expected of it in the near future.

Polio Infection: Once upon a time it was supposed that poliomyelitis (infantile paralysis) entered the body only through the nose. Now it is known that it can also enter by the mouth, that sewage may harbor the virus of the disease and that flies may carry the virus.

Along comes Dr. Albert E. Casey (Louisiana State University) with a communication to Science in which he reports his findings in an epidemic of "polio" which occurred in Walker County, Ala., in 1941. In this epidemic human travel was a major factor. Eighty per cent of the patients had "probably visited or been visited" by a prior poliomyelitis victim who was in the late incubation or early prodromal (preliminary) period." But Dr. Casey is unable to state just how the transfer of the virus was accomplished.

ACUTE CHOLECYSTITIS

Francis M. Massie, M. D.
Lexington

In discussing acute cholecystitis there are two matters of great importance. First, we must define the term accurately and second, we should realize that the ideal treatment can seldom be carried out because only one patient in five enters the hospital during the first twenty-four hours of the attack.

By acute cholecystitis we mean a clinical picture characterized by most of the following: severe pain, fever, leucocytosis, local tenderness, nausea, vomiting and palpable mass in the upper abdomen. In these patients the gallbladder is engorged, edematous or necrotic, or an abscess or suppurative process may be present in the gallbladder, the bile ducts or liver. We do not limit our diagnosis of acute cholecystitis to those whose gallbladders show polynuclear infiltration on microscopic examination. The most constant pathological changes found in our series are edema, fibrosis, eosinophilic and round cell infiltration, flattening of the mucosa or its replacement by scar tissue. Many have polynuclear infiltration with suppuration but only six of our series had these acute changes alone. This seems to mean that acute cholecystitis when it comes to operation has practically always been preceded by inflammatory or degenerative processes of a chronic nature. This pathological evidence fits the clinical picture for most of our patients (six out of seven) gave a history of mild to severe dyspepsia for months or years, and many had had previous acute attacks similar to the one which finally led to surgery. For this reason we do not think it fair or sensible to limit consideration to those whose gallbladders show pus, polynuclear infiltration or infection.

Acute cholecystitis is primarily due to obstruction of the cystic duct, usually by stone, often by one large stone impacted in the ampulla of the gallbladder. This obstruction is followed by edema of the wall, partial or complete shutting off of the blood supply with resultant engorgement, hemorrhage into the mucosa and necrosis unless relieved. Only as a late secondary complication does bacterial invasion occur with suppuration and abscess. Though serious complications, abscess, perforation and peritonitis, do occur, they are not so serious or frequent as in acute appendicitis because the bacterial content of the gallbladder differs from that of the appendix in number and virulence. Though early operation is important and reduces mortality and morbidity, as we shall try to point out in this paper, it is not so important as in acute appendicitis for this very reason.

In a series of 1000 patients with gallbladder disease operated on in the Lexington Clinic we have selected 159 having acute cholecystitis. Our 15.9 per cent acute gallbladder disease (Table 2) is higher than that of most observers, possibly because our classification is more liberal.

Of our 159 patients, 119 were females, the usual three to one ratio (Table 1). Two-thirds of our patients were between 30 and 60 years of life (Table 3) and the mortality in this group was lower than in the older and younger groups (Table 5). The mortality in all was 8.1 per cent.

Table 1

Sex Incidence		
	Males	40 or 25.5%
	Females	119 or 74.5%
Sex Mortality		
	Males	5 or 12%
	Females	8 or 7%

Table 2

Relation of acute to chronic cholecystitis	
Acute	159 or 15.9%
Chronic	841 or 84.1%

Table 3

Age Incidence:	
20-30	8%
30-40	24.2%
40-50	16.7%
50-60	26.2%
60-70	16.2%
70-80	8.7%
Youngest 23 years.	
Oldest 80 years.	

Table 4

Incidence of Stones		
	Gallbladder	146 or 92%
	Common duct	12 or 7.7%

Table 5

Mortality by Age Groups

Age	Cases	Deaths	Mor'lity %
20-30	13	2	16
30-40	38	2	6
40-50	27	1	4
50-60	43	2	5
60-70	25	3	12
70 plus	13	3	25
	159	13	8.1

Read before the Kentucky State Medical Association, Louisville, September 28, October 1, 1942.

Table 6
Mortality and Type of Operation

Operation	Cases	Deaths
Cholecystostomy	65	8
Cholecystectomy	91	5
Choledochostomy	12	0

Three cases required subsequent choledochostomy for stone in common duct.

Table 7
Days in Hospital
Cholecystotomy Average 27.4
Cholecystectomy Average 21.4

Table 8
Delay and Mortality

Entrance to Hospital	Mortality	% Total
Less than 24 hours	3%	20.6
24 to 72 hours	6%	26.4
72 hours plus	10%	53

Table 9
Relation of Jaundice to Common Duct Stone

Jaundice.....26.3%
Common duct stone.....7.7%

Table 10
Cause of Death

Pneumonia	1
Hepato-renal syndrome	3
Peritonitis	3
Hemorrhage	3
Cardiovascular accidents	3

The incidence of stones is rather high in our series (Table 4), 92 per cent. Since this study was made we have operated on four persons with acute gangrenous gallbladders who have had no stones; but we still think this is relatively rare. Whenever possible we have removed the gallbladder (Table 6). Sixty-five patients had drainage of the gallbladder without removal and among these were eight deaths, while there were only five deaths in 91 patients whose gallbladders were removed. This difference is undoubtedly because cholecystostomy was done for the graver risk patients. Of these 65, 13 had subsequent cholecystectomy at our hands. It is likely that a good many more had their gallbladders removed elsewhere. Though cholecystectomy shortens the hospital stay (Table 7), simple drainage is safer in older people. Of 65 cholecystostomies, 48 were done on the 81 patients over 50 years old.

There are no rules which can be laid down to govern one's choice of operation. This must be determined at the time for each individual.

What is the best time to operate on patients with acute cholecystitis? Here again there can be no set rule. Our present tendency is to operate much sooner than we did ten years ago. Those who believe it is safer to wait advance the reasons that the operative risk is greater in the face of any acute inflammation, that the correct diagnosis is often not made for several days, that 75 per cent will subside with conservative treatment. Against these reasons we may argue for early operation. That delay may result in jaundice, abscess, cholangitis, perforation and peritonitis; that perforation may not be free into the abdomen but into the liver with great damage; that each attack makes subsequent surgery more difficult and a greater risk to the patient; that we can't foretell which will subside. We do not operate on any patient in the first 24 hours in whom the correct diagnosis has been made unless there be perforation or associated acute pancreatitis. We think it is exceedingly important to get these patients to the hospital as soon as seen. Only in the hospital can adequate preoperative care be given. The importance of early hospitalization is shown in Table 8. The mortality in patients admitted during the first 24 hours was 3 per cent compared to 10 per cent in those who entered after the third day. The discouraging feature of this analysis is that only 20 per cent of the patients with acute cholecystitis were admitted on the first day of the attack while 53 per cent came in after the third day.

In Table 9 we see the relation of jaundice to common duct stone; 26.3 per cent of our patients had clinical jaundice while only 7.7 per cent had demonstrable stone in the common duct. This is a very different relationship from that in chronic cholecystitis. Usually the cause of jaundice, which is always obstructive in type, is edema of the ducts and surrounding tissues in acute cholecystitis. For this reason the common duct should not be explored in jaundiced patients with acute cholecystitis unless there is quite obviously a stone. Such exploration means a far greater risk to the patient. In 12 patients whose common ducts were opened there happened to be no deaths. The number is too small for justifiable conclusions. That only three patients of 147 needed subsequent common duct exploration is justification for our conservative attitude toward common duct surgery in acute gallbladder disease.

Pre-operative care is so exceedingly important that we feel some mention should be made and details given even though thoroughly understood by everyone. Glucose is the sheet anchor in this preparation. It is given by mouth when possible in the form of sticky candy, and reinforced by 5 per cent glucose, 1000 cc. in the vein twice a day. Vitamin K is given 1 mg. by mouth three times a day and when not possible it must be given by hypodermic. We do this for all patients and do not limit its use to those with jaundice. Where obstruction of the common duct is complete (acholic stools) the Vitamin K is always given by hypodermic because it is not absorbed from the intestinal tract in the absence of bile. When indicated, and not as a routine, we use the Wangensteen negative pressure tube and blood transfusions. Since the effect of bile salts on liver function has been shown we have used them as a routine whenever the patient could take them by mouth. Recently we have employed the Quick hippuric acid test to determine liver function but its limitations appear chiefly in those who are most gravely ill so that its usefulness in acute cholecystitis is not as great as in chronic type of the disease. Almost as important as glucose in restoring or maintaining liver function is adequate protein. We give this in blood, blood plasma, and by mouth in eggs and milk where practicable.

The causes of death (Table 10) were pneumonia, one; hepatorenal syndrome, three; peritonitis, three; hemorrhage, three; cardiovascular accidents, three. The three deaths from hemorrhage all occurred in jaundiced patients before the discovery of Vitamin K and might be prevented now. Possibly one or more of the hepatorenal syndromes might have been saved had we understood better the function of glucose, protein and bile salts in preserving liver function. The use of sulfonamides in pneumonia and peritonitis might have resulted in a further reduction in our mortality. We do not think a mortality of 8.1 per cent in surgery for acute cholecystitis is good. Our total mortality for the 1000 cases is 3.1 per cent (31 deaths) which means 18 deaths in 841 cases of chronic cholecystitis or 2.1 per cent in the latter group. We do believe that proper preparation and after care have reduced and will further reduce our mortality very considerably.

SUMMARY

1. Acute cholecystitis is primarily due to obstruction, not infection.
2. It is usually preceded by other attacks which have left chronic changes in the gallbladder and mucosa.
3. Because adequate preparation is so important, early hospitalization is paramount.
4. The optimum time for operation is 48 to 72 hours after admission.
5. Mortality may be reduced by the conscientious use before and after operation of glucose, protein, vitamins, and, where indicated, sulfonamides.

DISCUSSION

Misch Casper, Louisville: I agree almost entirely with everything that the Doctor has said. He has given a splendid resume of the subject up to the present moment. Our mortality, as he said, is being reduced by preoperative treatment and sulfonamides, and especially vitamin K.

I wish especially to emphasize one point, that, in my statistics, women have cholecystitis more than men. I dare say that I have ten women to one man. I think the reason is self-explanatory. We know all gall bladder disease is, one might say, the result of a fellow's digging his grave with his teeth. It nearly always comes from over-eating. I just wonder, if food is rationed as it is being rationed in other countries, whether that won't reduce the number of cholecystitis and gall bladder cases quite a bit in the warring countries.

I think that women have it more than men because when they carry a child and are nursing the child, it is quite right that they should eat enough for two. After they wean the baby, they go farther and eat enough for four. So it behooves the obstetrician in these cases to warn his patients about this habit of over-eating. I think that will explain, to a very large extent, why women have cholecystitis more than men.

Another reason that we have it less in men at the present time is the good work the state boards have been doing in reducing typhoid fever. You hardly ever see a patient with a history of typhoid fever who doesn't have cholecystitis following sometime in his life. It is always important, in taking the history, to find out whether the patient has had typhoid fever. If so, you can be nearly sure you have, or will have sooner or later, a case of cholecystitis.

The old question of -ectomy and -otomy comes up, and I think the Doctor solves it very well. It is a pretty hard matter, sometimes, to decide this problem. Our rule is if we get a case early, in the first twenty-four hours, we op-

erate on it immediately. If it is after twenty-four hours, then we feel it better to wait awhile and prepare the patient, unless, as the Doctor says, we have a perforated gall bladder. It is surprising how much bile can be in the abdomen without a great many symptoms of perforated gall bladder. We have one at the hospital now, and there was about a gallon of bile in the fellow's abdomen. I never saw so much bile in an abdomen in my life, and yet he had a low leukocyte count, about 15,000 or 16,000. He wasn't very sick, and we weren't suspecting even a perforated gall bladder; but as we got him early and operated on him, the fellow is going to get well in spite of the fact that he had a chemical peritonitis. Sulfanilamide helps in chemical peritonitis as well as in infection, because it keeps down the tendency towards infection.

The family doctor can do one thing: that is, get the patient to the hospital. Any patient who gets an acute abdomen or cholecystitis should be gotten into the hospital. These patients cannot be handled in the home. There is great advantage in having them in the hospital, as they can be given proper treatment and checkups that the average practitioner does not have. Repeated blood counts are of great advantage in knowing what is going on in the abdomen; the relation between the polys and the leukocytes is also a valuable sign. With these aids the doctor has his hand on the patient's pulse, as it were, and can follow the progress of the disease. A great many of these cases will be saved if they are gotten to the hospital early.

Another very important point that I wish to stress is checking up on the liver function. The liver is more or less diseased either before or after these cholecystitis cases. We have now some very valuable liver tests that we didn't always have, by which we can get a pretty good line on the liver function. It is very important to know what the liver is doing in these cases, because, as we know now, the kidneys are more or less affected in their function by what the liver is doing. If we have a lot of hepatitis, we have a very sick patient. In these cases the gall stones ought to be checked up. If the patient has had one or two attacks, he should be X-rayed to know whether the gall bladder is functioning or not. I don't think there is any doubt in the world that any gall bladder that is not functioning should be removed. It is like a splinter in the finger; it is not doing the patient any good, and the quicker it is out, the better.

Will Mayo paraphrased it this way: It isn't innocent gall stones; it is innocent doctors. There you are. When patients get over one attack they have another, one attack after the other, always getting worse, more liver damage, more kidney damage, and sooner or later even heart damage in most cases. Why procrastinate and let the patient get along to a state of invalidism before attacking the primary source of his trouble and getting rid of it? Many of these patients can be saved if gotten early. One thing we stress more than anything else: Get them to the hospital, get them early, and get busy.

E. L. Henderson, Louisville: There are just one or two points I want to mention.

One is the time of operation. As I have seen more and more of these cases in the past few years I have become thoroughly convinced that the best time for operation is as soon as the patient can be properly prepared. Usually, when these cases are brought into the hospital they are very much dehydrated and it is absolutely necessary to give them fluids. Usually, we use 10 per cent glucose and try to bring up the fluid levels to as near normal as possible and then operate as promptly as possible.

Recently, I saw a patient who was brought into the hospital one afternoon; we decided to postpone the operation until morning in order to bring the patient's fluid level up and get him in better condition. At ten o'clock the next morning when we operated, he had a perforated gallbladder. I am positive that if we had operated within the first twelve hours after the patient came into the hospital, he would not have had a perforated gallbladder. When perforations occur, the prognosis is much graver but, in this case, all went well and the patient made a prompt and uneventful recovery.

Another point concerns the removal of the gallbladder. I think it is safe to say that over the past five or six years, we have removed 98 per cent of the gallbladders undergoing surgery. Even with the patient in a serious condition, it is practically as easy and as safe to remove the gallbladder as it is to drain it. In removing it, you remove an infected organ which, if left in situ, can only cause more toxemia and considerably more danger. The morbidity is much greater and the mortality higher, I think, when the gallbladder is left in.

Our experience has been somewhat different from that of Dr. Casper and Dr. Massie regarding sex of patients with acute gallbladders. I do not know why this is, but over the past few years, we have found more acute gallbladders in the male than in the female. It is true that the percentage of cholecystitis and cholelithiasis is much higher in the female but in acute conditions, we have found more cases in the male than in the female. It may be that the

male does not take proper care of himself and is inclined to drift along and wait until the last minute.

Recently, we had two cases of acute gall-bladder disease come into the hospital one Sunday evening. They were so sick that I did not feel that I was justified in putting them off until morning and operated promptly. One happened to be a doctor who had a gangrenous gallbladder and the other had a perforated gallbladder in very much the same condition described by Dr. Casper. There must have been a gallon of bile in this patient's abdomen. The next morning I had a blood sugar test done on him and found his blood sugar was 500 plus. I learned this man had had a diabetic condition for years; he had taken care of it for several years and then dropped his insulin and hadn't had any treatment whatsoever recently. The greatest difficulty in this case was controlling that man's diabetic condition but with it under control, he made a very prompt recovery.

Another point with which I would disagree with Dr. Casper is that women, during pregnancy, overeat to the extent that he thinks they do. It isn't a question of overeating in these cases; it is a question of an abnormal or upset metabolism. Of course, overeating may contribute to cholelithiasis, but I think in the pregnant woman all of us see so many cases where the history starts at the time of pregnancy and I think it is a question of the metabolism and not a question of eating.

C. C. Howard, Glasgow: I want to emphasize one point in gall-bladder surgery, and I am doing it after years of serious trouble. Many times I have operated and have seen other men operate who didn't have good exposure, they didn't have perfect relaxation, they didn't have good light, they didn't have good teamwork. If there is any place you need it, it is in the upper abdomen when you open the common duct and are working around the head of the pancreas. There is nothing that will add to this as well as continuous spinal anesthesia. It is the best thing that has come along. I mean spinal anesthesia that you can control, a small dose, and then you can give another little dose. With your spinal anesthesia, in the lower abdomen, if it is a short operation you need only one dose, but when you are going into extensive surgery and you must have good relaxation, you should give a small dose and repeat as you did in the old days of ether when you dropped on more ether. It adds ten to fifteen per cent to accuracy, and that adds to the safety of the patient. It adds to your relaxation. Then you can explore and look into the common duct, and the more experience you have with gallbladder surgery the more you know you should look into the common duct.

Francis Massie, (in closing): Dr. Casper brought up the point of functional studies both of the liver and of the gall-bladder. We can't make functional studies of the gall-bladder in acute cholecystitis because the dye is apt to increase the trouble. It is quite right to make the proper functional studies of the liver, and they ought to be done every day. The one test I mentioned is not especially applicable to gravely ill people, but there are other tests which we should use more frequently in determining liver function before we operate.

In regard to the function of the gall-bladder as measured by cholecystogram, in chronic cholecystitis, not acute, I think we may be often misled by finding no shadow in the x-ray after the administration of the dye. Of course, Dr. Casper and all the rest of us do not believe in operating on people who show no gall-bladder shadow, if that is the only indication.

I think a history of gall-bladder disease and repeated attacks is more important than a negative shadow, because there are a good many conditions which are accompanied by failure of the liver to put out the dye in the bile.

Dr. Henderson mentioned removal of the gall-bladder in acute cholecystitis in 98 per cent of his patients. We certainly don't agree with that, and we feel that that is much too high. A good many of these people are over sixty years of age and too ill for cholecystectomy under these circumstances. As I pointed out, of our 65 cholecystostomies 48 were done in people over fifty years of age. We use 5 per cent glucose and not 10 per cent, because we think 5 per cent does not tend to dehydrate and they do get enough glucose with 5 per cent.

The reason we perhaps do more cholecystostomies in older people is because we often use local infiltration for anesthesia. I am much attracted by what Dr. Howard says about continuous spinal. That may be the answer, but in older people who are gravely ill we are inclined to use local anesthesia by infiltration and do a simple cholecystostomy.

The Hippocratic Oath, still taken at some universities by graduates in medicine, is a code of ethics for physicians. It ends thus: "Whatsoever house I enter, there will I go for the benefit of the sick, refraining from all wrongdoing or corruption . . . Whatsover things I see or hear concerning the life of men, in my attendance on the sick, or even apart therefrom, which ought not to be voiced abroad, I will keep silience thereon, counting such things to be as sacred secrets."

THE KENNY METHOD OF THE TREATMENT OF INFANTILE PARALYSIS

RICHARD T. HUDSON, M. D. B. S., F. A. C. S.
Louisville

As recent as three months ago, the date of our latest epidemic of Infantile Paralysis, I was skeptical and indifferent to the method of treatment used by Sister Kenny. It was my good fortune, and that of Dr. Wilder, to go to Minneapolis in August to study the method under Sister Kenny. We took an intensive course for physicians, which consisted of lectures, case presentations and demonstrations by Sister Kenny and her staff at the University of Minnesota Hospitals. There were 35 doctors there, from all parts of the U. S. and Canada, asking questions, skeptically examining her patients, comparing the method with other forms of treatment. After seeing the treatment in its entirety, as carried out by its originator, I am happy to say I am a convert to this heretofore, unorthodox treatment. We are very fortunate here in our city to have Dr. Wilder, a resident intern, who is with the patients constantly, and Mr. John Untereker, graduate physiotherapist and specially trained Kenny technician, who is here for 3 months directing the treatment.

I shall attempt to give you a brief background of Sister Kenny and the method she evolved for the treatment of Infantile Paralysis. Miss Kenny graduated as a nurse in Australia in 1911. She took up "bush" nursing, corresponding to our frontier nursing service here. She was suddenly thrown upon her own resources to treat a group of children who suffered from a paralyzing disease. Upon her call for medical help, 100 miles away, she was informed the disease was infantile paralysis, and there was no known cure. She noted the pain and muscle spasm present, and conceived that hot applications (fomentations) would give relief and applied this treatment. The patients improved remarkably, she says, and recovered.

Two or three years later she consulted with medical men at the medical center, who described to her the new treatment devised in England by Sir Robert Jones, and Dr. Lovett in America. She then related how well her cases had recovered, and began to try to convince the medical men of Australia of the value of her treatment. She was met with much opposition by the doctors, and it was only after years of struggle that she got a clinic, and was able to treat cases first hand. Her method was finally used more widely, and Dr. Melvin Henderson, at the Mayo Clinic, heard of her work.

She was brought to America in March, 1940, by the National Foundation for Infantile Paralysis, of New York City. She went to see Dr. Henderson at the Mayo Clinic, and was sent to the Minneapolis General Hospital, where she began to treat cases in June, 1940. This work was under the direction of Dr. Wallace Cole, Professor of Orthopaedic Surgery, University of Minnesota.

I shall quote freely from pamphlet No. 40, issued by the National Foundation for Infantile Paralysis. Nothing occult is involved in the Kenny method, but it does demand an intimate knowledge of muscle anatomy, the neuromuscular system, and much attention in detail to muscle reeducation. The principle can be learned quickly by the physician, but the technical practice of the method, requires mastery of many details if satisfactory results are to be obtained. The workers for this should come from physiotherapists, and possibly graduate nurses. The treatment must be begun as soon as the case is diagnosed, in the quarantine period. The hot packs can be carried out by nurses and orderlies after a short period of training. The reeducation of muscles can be done only by technicians, with the highest skill and ability. The Kenny Concept is fundamentally different from that heretofore prevailing. She feels that much more than the anterior horn cells are attacked. The sympathetic nervous system is affected and she feels there is a toxic or pathological condition in the muscles themselves. She feels that the disease is a spastic condition of the muscles and not a flaccid paralysis as we have always been told.

The three factors distinguishing the Kenny Concept are:

(1) Muscle Spasm, (2) Incoordination, (3) Mental Alienation.

MUSCLE SPASM: This denotes a group of symptoms including fibrillary twitchings (fasciculation,) hyperirritability of the muscle and stretching and a more or less state of toxic contraction of the muscle fibers, which cannot be overcome even by great force. Careful examination of the patient acutely ill, brings strikingly to attention that he suffers from some-

Read before the Jefferson County Medical Society, October 5, 1942.

thing more than weakness of muscles. The affected muscles are painful, tender, irritable, and in spasm. If spasm is unrelieved, it will result in muscle destruction and permanent changes and deformities. Hope of restoring function to the damaged motor mechanism depends upon keeping the muscles soft, long, and receptive through the relief of this spasm. Muscle spasm will cause further disruption of the motor system by eliminating, or "alienating," non-affected muscles, and will produce incoordination in the muscle concerned in the joint motions of the region involved. Muscle spasm represents muscle contraction. Prolonged contraction, if unattended, results in muscle contracture, fibrosis and deformity. The muscles must be kept soft, flexible, and receptive to nerve impulses. I saw many cases treated by the Kenny method, and not one had a contracture, deformity, or scoliosis.

Incoordination: There are 2 types: (1) That due to the sending of motor impulses intended for a certain muscle to other muscles, or groups of muscles, due to such conditions as pain, or attempted motion of the involved muscle, or inability of that muscle to perform its proper function.

2. That occurring in the involved muscle itself so that ineffective contraction producing maximum motion at the insertion of the muscle.

Uncontrolled voluntary motion, when attempted in the presence of spasm, leads to incoordination. All motions of the patient must be carefully supervised and directed.

Mental Alienation: This term is used by Sister Kenny to describe a condition in which there is inability to produce a voluntary, purposeful movement in a muscle, in spite of the fact that the nerve paths to the muscle are intact. Non-functioning muscles in this state may remain useless unless treated. "Mental awareness" must be developed, by tendon stimulation, etc., as will be shown. A good example of this condition is in the quadriceps after knee operations, where the patient cannot move the patella, though there is no paralysis.

In conclusion let me emphasize: 1. The patient must be treated immediately to relieve, and keep relieved, muscle spasm.

2. A very careful and detailed system of muscle reeducation instituted to make every muscle perform its specific, normal function.

THE KENNY TREATMENT OF POLIOMYELITIS

Milton J. Wilder, M. D.
Resident, Kosair Crippled Children's Hospital
Louisville

It is a privilege to attend this meeting. I also consider it a privilege to have been able to go to Minneapolis, where I took the physicians' course under Sister Kenny, and it was indeed a great pleasure to have been able to be at Kosair where the treatment was started. We will make this informal. I don't want to mislead you with my enthusiasm, but after observing the results I feel that I have the right to be enthusiastic.

While at Minneapolis one of the chief controversies was that we should have controls: treat one case with Kenny treatment, one with the so-called orthodox method. I felt and stated that this was unnecessary. We have had years to observe the old treatment. We are all familiar with the results. The crippling effects as a result of orthodox treatment are well evidenced in our clinics and on the street. I will attempt to point out to you the improvements we have made with the Kenny method as compared to the orthodox. The first thing to be considered is diagnosis. I think that the Kenny concept has opened our eyes to many new diagnostic points.

There are many symptoms present that we never saw before, probably because we were willing to accept the condition as it was evolved for us years ago. A vivid example of this is a case of a boy 11 years old, sent into the hospital with a diagnosis of either tuberculosis of both hips or infantile paralysis. The boy's chief complaint was pain in the glutei, bilateral. Of course, I considered immediately, the fact that tuberculosis of both hips is rare. On examination the patient had marked spasm in posterior neck, right sterno-cleido mastoids, back, both hamstrings, and shoulder abduction muscles. I think it is important to explain what we mean by spasm. I think it can be best described as tightness which produces pain on attempting to loosen the muscles although there are certain muscles which show definite spasmodic contractions when no attempt is made to move them, such as the abdominals and the pectorals. This patient

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presented a clinical picture found in no other condition than polio. Without the additional physical findings as presented by Sister Kenny, this diagnosis would undoubtedly have been difficult as there was no actual paralysis present.

In this case I did not feel that a spinal puncture was indicated to help establish a diagnosis. In a round table conference at Minneapolis I asked Dr. Pohl why spinal punctures were being done as it has been definitely proven this procedure increases spasm. The answer I received was that it was routine. I raised the question of why we shouldn't get away from routine. I believe that has been our great difficulty in the past. True, there are cases, that may present some doubt in diagnosis, then a spinal puncture is perhaps indicated but we should get away from the routine "tap."

Minimal handling of the patient cannot be over-emphasized as spasm is increased by excessive motion. A muscle analysis is done in the following manner: for example, the head is gently lifted from the table and spasm is detected by tightness and the production of pain. To determine spasm in the back, the hand is placed under the shoulders, and the patient is helped toward a sitting position. If tightness is present, this movement will be limited, and produce pain. The hamstrings are tested by raising the heel from the table and watching the facial expression for evidence of pain. The upper extremities are tested for spasm in a similar manner by an attempt to move them through their normal range of motion. Spasm of respiratory and abdominal muscles is detected by observation only. Time does not permit a discussion of a complete muscle analysis which is based on muscle mechanics and normal anatomical alignment.

In treatment of these patients, immediate hot packs are essential. The patient is placed in a blanket bed in a supine position, which has longitudinal boards beneath the mattress. The mattress is shortened at the foot of the bed in order to allow the foot to extend over the end of the mattress without disturbing the alignment of the foot during the time the patient is placed in a prone position. A foot board the width of the bed and approximately 18" high is attached and the feet are placed against the foot board if this does not produce pain in the calf muscles. Hot packs are always applied to the posterior neck, back and thigh. The details of hot packing will be discussed by Mr. Untereker. An interesting observation was the fact that the cases we got early and hot packed at once had minimal involvement in some way. Because of the above mentioned reasons doctors are urged to start hot packs at home while arrangements are being made to transfer the patient to the hospital. The remainder of the treatment, tendon stimulation and muscle re-education, will be taken up in the next paper.

Previously, use of the respirator has been over-emphasized, especially in cases where hot packs will release muscle spasm in the accessory breathing muscles. Two weeks ago a boy was sent in from St. Joseph's Hospital and we were instructed to have the respirator ready. On admission a muscle analysis was done and the chest found to be absolutely immobile. There was spasm present in the pectorals as evidenced by a cupped shoulder and in the rectus abdominus which had an increased outline and spasmodic contraction. This can be explained by the pectorals preventing lowering of the chest and the abdominals preventing raising. This patient had a respiratory rate of 36. Hot packs were applied immediately to chest and abdomen and were changed every eight minutes. At the end of two sets of packs the intercostals began to function and the respirations improved and were counted at 28. After this improvement the treatments were changed each one-half hour for the rest of the night. The next morning the child voluntarily sat up in bed and was comfortable. He was ready to be discharged 12 days after admission.

A 17 year old girl was admitted to the hospital at 6:30 one evening. She appeared restless. At 1:00 A. M. respiratory difficulty appeared very suddenly and in spite of hot packs it was necessary to place her in a respirator. The patient died one day after this. An autopsy was performed and the pathologist's report was that it was the most extensive involvement he had ever encountered. We have taken the stand that when there is spasm of the muscles of respiration and the spasm can be relieved by concentrated hot packs, the use of the respirator is unnecessary. There are, however, cases as the one mentioned above in which the use of the respirator is indicated. To date, our results have been encouraging, we have had 40 cases under treatment; 10 have been discharged as normal from the hospital with an average of 29.2 days; 11 of those remaining in the

hospital are up walking but have not been discharged; 1 patient died. The remaining 18 are progressing satisfactorily and include some recently admitted cases. Only one of this group may need braces. A large percentage of children we treated previously by orthodox method have had to have braces.

In conclusion, we should be grateful to Sister Kenny for bringing her method of treatment to this country. We are definitely getting much better results and it has opened new fields for research. It is something new and requires a physiotherapist specially trained in muscle physiology, anatomy and kinesiology.

DEMONSTRATION OF THE SISTER KENNY TREATMENT

JOHN J. UNTEREKER, TECHNICIAN
Kosair Crippled Children's Hospital
Louisville

The Sister Kenny hot packs are taken from boiling water and wrung thru a tight wringer twice to take out the water. The material is a sheet of wool blanket or comparable material, which is placed in double thickness around the area to be packed. This is covered with oiled silk and an outer covering of blanket material cut to fit the size and shape of the limb. They are placed around the limb from joint to joint and never covering a hinge joint. This is to give no feeling of splinting of the joint and to make it possible for the technician to do tendon stimulation while the child is in hot packs.

In order to determine where the hot packs are to be put on, an accurate muscle analysis is made which is done by observation as far as possible. Usual spasm will be detected in the neck, back and thighs and for this reason we always pack these areas, in addition to the other areas of muscle spasm as indicated by the muscle analysis. During the first two or three days we handle them as little and as easily as possible in order that the spasm be released as quickly as possible. For this reason it is desirable to wait an extra day rather than to risk too early an attempt at motion. These packs are left on routinely for the 12 daylight hours and changed every two hours. In the event of a severe spasm, pulling a limb or part of the body out of normal position, we would change then as often as indicated which may be 15 to 30 minutes.

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The next step is tendon stimulation which is done by moving the limb through a very short arc and getting a slight pull on the tendons of the muscles which are the prime movers and setting up the myostatic reflexes. This is done to the alienated muscles three times daily.

When passive motion of the limb within a reasonable range does not elicit pain, muscle reeducation is started. In order to understand this system of muscle reeducation, two important classifications of muscles are made. The first muscles which contract within their normal resting length (deltoid) and second those which must be removed from their normal resting length before a suitable contraction can take place (pectoralis major). In muscle re-education we attempt to approximate a normal motion doing the movement slowly and in rhythm with the patient's effort, mental and physical. The limb to be re-educated is grasped with a particular type of grip to facilitate getting the correct motion and to prevent incoordination. The stress is for an accurate rhythmic contraction pulling effectively from the tendon of this muscle rather than for a strong ineffective or incoordinated contraction. The patient is asked to think of moving the limb by concentrating on the tendonous origin of the muscle in question. Then the physiotherapist moves the limb through the correct range passively using the principles as stated above. On the third movement the patient is asked to assist but no effort is made to have the involved muscle lift the limb alone as this would produce incoordination and destroy rhythm.

After a suitable contraction on the third attempt, we progress to one passive and two active assistive motions. When these are done satisfactorily we progress to three active assistive motions. When it is felt that the patient can attempt without incoordination, the motion alone, we do three active motions. The re-education of these patients is analogous to a beginner attempting to play a piano. He has muscle power and all of the basic movements necessary but in order to play effectively he must start with simple music exercises and gradually build them into major music patterns.

The involved extremities are all re-educated and when the patient can be placed in a sitting position with the legs flexed over the side of the table we attempt to teach them sitting posture, re-educating the trunk muscles to their normal func-

tion. When it is felt that the patient is able to partially support himself, he is placed with his feet on the floor and supported by the attendant while attempting to teach him standing posture. When this is attained he is gradually taught the mechanics of walking. First in position and then with walking sticks under supervision. This is a very important stage of treatment in that each error of mechanics of locomotion must be corrected at once so it does not become a habit. There is no attempt to take away the walking sticks until the patient can walk perfectly without them, meaning that we are not satisfied with just any kind of walking because it has to be correct walking.

DISCUSSION

M. J. Wilder: T. H., age 16 years, a case of one year's duration wearing a back and bilateral long leg braces, walking with crutches.

One thing about this boy, when we got him back, he could not get on or off the table by himself. After six weeks, he is able to walk, and go down steps by himself. He used to have to be carried, dressed and undressed, taken off the table. If that isn't proof enough to show how much better this method is, I do not know what would do it. He comes in three times a week; gets hot packs at home. He had quite marked hamstring tightness and paralysis of the back.

Oscar Bloch, Jr.: What about hot packs?

M. J. Wilder: We use wool and a double thickness of blanket. Boil it for twenty minutes. Use an electric wringer. You can use a hand wringer, but with the hand wringer, wring it twice. Be sure there is no moisture. The packs are so hot I can't hold them in my hand. After putting packs on, put oiled silk on over it, then the dry blanket. We use a blanket so that heat will be retained.

J. Untereker: This is a presentation of a four year old boy who knows the names and actions of chief muscles of the body. In the last week, only, he has been able to support his neck. It took three weeks' work to teach him the names of the muscles.

Oscar Block, Jr.: What would have been the old physiotherapeutic method?

M. J. Wilder: No heat would have been applied. Patient would probably have been put in a cast from two to six months, then he would have been given heat and massage after he came out of the cast. Sister Kenny does not believe in massage.

M. J. Henry: How much does an attendant have to devote to each patient? How many patients can one attendant take care of to get the most desirable results?

J. Untereker: About eight patients. Some patients get tendon stimulation three to six times a day, for the best possible results; once a day for muscle re-education which should take an hour. In that way, each time you can concentrate on alienated muscles and get the best possible result. With our setup at Kosair, that time is not available, so we must take a few short cuts and do our best. We take patients from the start. Incoordination cannot be demonstrated as we are very careful in starting muscle re-education.

J. B. Lukins: Where are attendants trained? How soon after the diagnosis of poliomyelitis is made should hot packs be started?

J. Untereker: At Minneapolis, under University of Minnesota. Dr. Knapp is the Professor of physio medicine and director of Kenny course. The treatment should begin as soon as diagnosis is made.

E. L. Heflin: Is there any objection to starting hot packs while diagnosis is being made?

J. Untereker: No, that is the safe thing to do.

F. W. Caudill: How long is average time for muscle re-education? How is the Poole boy progressing?

J. Untereker: Until a satisfactory contraction is obtained or sure of paralysis. A little girl was in four weeks with no perception of quadriceps; then, all of a sudden, there it was and it remained.

The Poole child is coming along as well as could be expected. He had spasm of the anterior and posterior muscles. Today, he is able to sit up. He really was tight as a board. He has a spasm in the biceps, but now he uses them quite well. As far as I can tell, he will have very little paralysis, he is however very apprehensive. Another little boy, Hollis O'Neal, is very much the same type of case. He is far ahead, has more nerve, will try more things.

J. B. Lukins: How long should packs be continued at first?

M. J. Wilder: Put on every two hours for the twelve hours of the day; not at night. One case came in at six o'clock at night. We hot packed him all night. He came in very, very stiff. The next morning, he sat up in bed. He had very little spasm left.

In the case of respiratory difficulties, particularly in the accessory muscles, apply a single layer of hot pack and cover it with oiled silk. In that respect, if you are having respiratory difficulties, you want to clear this up first with hot packs before attending to other spasm. However, if you are going to pack the rest of the body, put on two to four thicknesses of heavy blanket, cover with oiled silk, then cover the outside with a piece of dry blanket to hold in place.

F. W. Caudill: Is an electric pad a satisfactory substitute?

J. Untereker: No, it has been found that hot packs as put on by this method are markedly superior to any other method of heat. The packs are taken out of boiling water, run through a wringer to take out moisture. After the patient has been packed a couple of times he can stand that heat. If you get the water out of the pack, it won't burn. If not careful in wringing them out, and you have a wet spot, you can get a blister. The theory for using wool in the inner pack, the main heat is in body of cloth, the woolly fibres keep it away from the skin and the intense heat radiates in.

M. J. Henry: What about the temperature of the room? What is the youngest child that will cooperate?

J. Untereker: Keep it at about 80-82 degrees. We are not too concerned about it if at ordinary temperature. The bed is made up with blankets; the patient is covered with a sheet and heavy blanket. We object to draft blowing across the patient. The patient may progress nicely one day then the next day spasm is increased due to a draft.

You have to have cooperation in this work. If the child will let you move him around and you have his confidence, it is relatively simple. In young children, if you can correctly do the movement for them, they will let you do it and imitate the movement. Children do things subconsciously.

J. B. Lukins: Will a young child more likely overcome this? How much muscular power do they require to walk without braces?

M. J. Wilder: That is difficult to answer. The older they are, the harder hit, usually. There was a girl at Minneapolis, who could not move a muscle in her body while lying on the table, yet that girl walked. Every doctor went over that girl, no one could believe that it was possible for her to walk.

M. J. Henry: How long has Sister Kenny been doing this, and how long does she follow her cases? What are her results?

M. J. Wilder: For thirty years. She never had scoliosis in 30 years. As Dr. Hudson mentioned, she has had quite a stormy course. When she first started they only gave her chronic cases; she just kept at them until the patients demanded it. It is remarkable, the way the children ask for the hot packs, for they relieve the pain. There is not better criterion than that.

If pulmonary tuberculosis is an insidious personal problem to those growing old, it is also one of the major unsolved health problems of the present day. Any effective approach to it must eliminate the present common attitude of simply sighing at the aged tuberculosis patient with positive sputum.

THE MUSCULAR DYSTROPHIES OR MYOPATHIES

Isham Kimbell, M. D.
Lakeland

There are numerous clinical varieties in this group and the history of the muscular dystrophies dates back to the time of Duchene who described a pseudo-hypertrophic condition in 1849, Leyden and Mobius wrote of the hereditary characteristics of the myopathies in 1876 and 1879. Erb really did pioneer work and attempted a clarification of the situation. It was Erb who called attention to the muscular origin as distinguished from the nervous origin in some of his cases as early as 1883 and he also described what we now recognize as the juvenile types. Landouzy, Dejerine, Charcot, Marie and Tooth described other types; Batten wrote a classical article on this subject in 1910 and Gordon Holmes contributed much to the knowledge of the condition; Timme and Goodhart called attention to the endocrine theory of the disease.

The myopathies have been spoken of as a motley group, but they make a fairly consistent group and although the forms may not resemble one another clinically at different periods of their development, they do have a number of common clinical characteristics.

Generally speaking the symptoms begin at an early age; the muscles become weak, gradually, and atrophy in a peculiar manner in that true hypertrophic fibres have been found with atrophic fibres in the same muscle. The muscular atrophy may involve all of the muscles equally, or may be irregularly distributed both as to the body in general or within the muscle itself. Reaction of degeneration and fibrillary contractions are usually absent, although a gradual loss of electrical excitability accompanies atrophy.

The pectoralis major, rhomboid and serratus magnus have, not infrequently, been found to be the seat of early atrophy. The tendon reflexes gradually disappear but the Achilles is apt to persist or occasionally may be increased especially with much pseudo-hypertrophy.

Sensory, bladder and visceral disturbances are usually absent. Pseudocontractures, with limitation of movement have been observed, causing peculiar positions. Biochemical researches have developed a large number of anomalies in metabolic

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relations among which are impaired creatin transformation.

A number of accessory lesions have also been described such as acromegaly, gigantism, idiocy, mental deficiency, hypothyroidism, leukoplakias, and pineal abnormalities indicative of muscle metabolic disturbances possibly related to neuro-endocrine disorder.

A myopathy is a chronic, progressive wasting of the skeletal-musculature frequently associated with hypertrophy or pseudo hypertrophy. The atrophy may, and usually does, affect first the axio-appendicular groups of muscles, namely, the hip and shoulder-girdles. It may begin, as in the rare infantile cases, in the face and scapulohumeral region. It may affect the back muscles severely. It may occur in any group of muscles, although it usually follows a fairly definite topographic and chronologic order. The pseudo-hypertrophy may be limited to special regions, such as the legs, and arms, but the essential character of the myopathies is determined by the fact that the muscles themselves are primarily or objectively the seat of the disorder.

Those who contend that the endocrine system may be related to the myopathy are also of the opinion that the lesion may be at the myo-neural juncture.

Clinically all of the objective signs refer to the muscular system and in all true dystrophies the nervous system is entirely spared. Therefore no fibrillations precede or accompany the atrophy. There are no sensory changes, no qualitative electrical disturbances and no neural distribution.

This disease usually begins early in childhood, at the age of seven or eight, even as early as three (our case), but sometimes as late as puberty or in adolescence. It is said to be very rare after twenty-five, but that has not been my experience, as I have seen a case after thirty five and it has been reported to begin in a man of advanced age. Very often several members of one family are affected. It may be hereditary and it is said consanguinity may play a part.

One of the earliest symptoms is weakness and this weakness frequently begins first in the hip muscles, causing a waddling gait. Later the glutei muscles and the muscles of the back begin to atrophy. It is noticed that the child has difficulty in sitting up or in getting up from a reclining position. This rather characteristic symptom has been, and I suppose still is, considered pathognomonic of the dystrophy. It has been noticed that these children roll on their abdomen, try to get up on their all fours like an animal and climb up on their knees. This is of course a reversion to the infantile method of rising. As the atrophy progresses, the patient needs support or assistance in rising and ultimately he can not rise of his own accord.

Scoliosis and more especially lordosis are quite common symptoms and are most marked on standing, later the thigh muscles become weak, then those of the shoulder girdle and those of the upper arm are affected. The distal musculature, that is, of the hands and feet, is usually spared; there may be atrophy of the tongue, palate, and muscles of mastication, even the heart muscle has been reported as affected. Where the facial muscles are involved, the orbicularis oris and the palpebrum, there results a special myopathic facies.

The atrophy is usually bilateral, sometimes it is symmetrical. The deep reflexes gradually grow weaker and are ultimately lost. Progressive muscular atrophy is slowly progressive and the atrophy may continue up to twenty or thirty years, sometimes longer. The weakness gradually increases because of the atrophy of the muscles, these patients gradually become helpless and later bedridden, although they may for a long time use their accessory muscles.

The pathological changes in the myopathies largely concern the muscular system. Changes involving the nervous, bony and glandular system have been reported. On autopsy the muscles vary in appearance, some are atrophied and others are hypertrophied. The two conditions may exist simultaneously in the same muscle and it has been said that there may even be a complete disappearance of certain muscles. The affected muscles vary in color from a pale pink to a dark red or may show an intermediate shade. White bands of connective tissue are later seen and these, together with fat, may replace the normal muscle tissue. There is an increase of the muscle nuclei and there may be vacuoles and fissures in the muscle fibres. The muscle plates may be found wanting, but these muscle changes are variable and somewhat uncertain so that no hard and fast rule can be laid down. We should bear in mind the fact that very few oppor-

tunities to investigate pathological material have occurred.

The changes in the bony system consist of rarefaction, trophic in character.

Chronic progressive muscular atrophy has been divided into three groups and we prefer this simple classification:

1. Cases in which the muscular atrophy is primary.
2. A large group of an obscure etiology in which the muscular wasting is secondary to slow destruction of the lower motor neurons.
3. Chronic, progressive, muscular atrophy due largely to involvement of the peripheral neurons. Our case comes under the first group.

Case Report

Thomas West: This patient was committed and admitted to this hospital October 1, 1942. No detailed information is available, however, father stated the following: Patient became extremely talkative during the first part of September and then began to wander about. On September 20th he appeared to be ill and the following day refused to eat and became "rather hysterical." He had attacks of laughing and crying which he could not control, could not sleep, kept everybody awake by laughing, also talking about the war.

Patient also believed that he possessed some supernatural powers and that he imagined that he was big and strong. He is described by his father, prior to this mental illness as a very quiet boy who helped some (but very little) on the farm.

Patient did not walk until sixteen months of age, could not talk until two years of age. In school he was backward and was taken out of school after 3 years of trial. When about nine years old he began to get weak and fall. A few years ago a doctor told him that the patient must have had infantile paralysis and that there is nothing he can do.

He had whooping cough at fourteen years of age, mumps at seventeen.

There is no history of alcoholism or other vicious habits. No history of venereal diseases. No police record.

On admission patient appeared to be poorly developed and poorly nourished. Height is six feet four inches, weight 115 pounds. Patient is unable to walk without assistance and it is difficult to examine him. Several teeth are missing and oral hygiene is poor. The chest is deformed, showing a marked sternal depression. The movements of the chest are restricted by the deformity. Lungs are clear. The heart is displaced to the left. BP 106/85. Pulse is 70 and regular. Peripheral vessels are soft. Abdomen is scaphoid, not tender, no masses palpable. Liver and spleen are not felt. No hernia. No hemorrhoids. No adenopathy. The G. U. system is apparently negative with the exception that the left testicle is larger. The muscles of the entire body are wasting. Joints and bones are apparently negative.

Patient is of low mentality, answers questions poorly. On admission he thought he was in the house of Germans and states "The Germans caught me and brought me here." He is not able to give reliable information.

Blood Kahn is negative. Urine is normal. Complete blood count and the blood sedimentation rate show no pathology. Blood sugar, creatinin and N. P. N. are within normal limits, basal metabolism 30.

Since admission there has been no appreciable change in patient's mental and physical condition. He has been disturbed at times, tearing up his bedding and while he is quiet and cooperative as to the ward routine most of the time, he remains delusional and cannot be engaged in ordinary conversation. From history and general observation it is evident that he is a feeble minded individual. The cranial nerves are essentially negative. There seems to be a refractive error of two diopters in both eyes but the fundi appear well defined, although slightly pale. The reflexes are generally absent except for active abdominal and achilles reflexes. The muscular system is markedly involved, revealing atrophy of the extremities and trunk. This is unequal in that it shows more atrophy in the right upper and lower extremities. Sensory findings are questionable. Patient reacts to pain stimuli over all areas tested. Coordination is fairly good except when using his entire body at which time he brings into play various compensatory movements. His posture is that of an extreme lordosis. In reaching a standing position from a lying position he merely climbs up his extremities. There are no fibrillary twitchings.

On recent examination some cardiac murmur, systolic in type, could be found over the apex and the pulmonic area but this may be caused by the displacement of the heart. Pulse is now 72 and regular and BP is 116/65.

Conclusion

Because of the sketchy history one has to rely on the objective findings. Mentally he may be diagnosed as a case of Psychosis with Mental Deficiency, neurologically the findings represent primarily a case of muscular dystrophy. The reflexes found seem in keeping with the location of muscle tissue, which is evident. This is especially pronounced in the absence of the bicipital and patellar reflexes, where a considerable amount of muscle wasting seems to have occurred. The process appears to be temporarily at standstill in as much as the patient has stabilized his weight. The x-ray findings in the examination appear compatible with the atrophy and rarefraction seen in disuse. At the present time this patient is afebrile.

Diagnosis: Primary chronic progressive muscular atrophy, psychosis with mental deficiency.

DISCUSSION

James B. Rogers: In looking this man over you see that the disturbance is by the muscular system and not by any segmental arrangement of the nervous system. When you see the patient, it is quite obvious that the proximal musculature is quite atrophied; that of the arm, leg and feet is still usable.

W. E. Gardner: I am awfully sorry that Dr. Kimbell is unable to be here this evening. I want to congratulate Dr. Landis on his presentation. The case is quite typical of myopathy rather than progressive muscular atrophy. I had occasion to see two cases recently, one of which seemed to be a chronic muscular atrophy and the other a muscular dystrophy. In reviewing the literature, I noted a few points of differentiation which might be of some interest.

In addition to those cases showing degrees of muscular atrophy as the result of lower motor neuron involvement, such as that following polyneuritis, acute and chronic anterior poliomyelitis etc., there is a large group of cases of muscular weakness and atrophy localized to certain muscles, where the voluntary motor nerves and nuclei are healthy, but the muscular fibres themselves are diseased. This group of diseases is called muscular dystrophy, idiopathic muscular atrophy, or myopathy.

According to the latest edition of the Diagnosis of Nervous Diseases by Sir James Purves-Stewart of Great Britain, there are two main classes of myopathy; (1) those cases in which all the affected muscles waste from the outset; and (2) those in which certain muscles undergo a false enlargement before they ultimately become smaller, so-called pseudo hypertrophic muscular dystrophy. There is, however, no essential difference between these varieties, according to the author just quoted, and he states that even in pseudo-hypertrophic cases, certain muscles undergo atrophy from the beginning, whilst others may show a combination of atrophy and enlargement in varying proportions.

Muscular dystrophy is a hereditary disease, although the symptoms do not appear at birth, and the new born child is apparently healthy, The age of noticeable symptoms varies from two to sixty years, but most cases appear in childhood or youth. It is stated that in muscular dystrophies, the excretion of creatinin is reduced while creatin itself appears in the urine, instead of the normal creatinin.

The chief distinguishing features between myopathic dystrophies and muscular atrophies of nuclear origin, spinal or bulbar, are given by Dr. Purves-Stewart as follows: The age of onset is earlier, as a rule, in myopathy than in progressive muscular atrophy or amyotrophic lateral sclerosis. Myopathy often runs in families; progressive muscular atrophy does not. The muscles affected are different in the two cases. In progressive muscular atrophy and amyotrophic lateral sclerosis, the wasting most commonly begins in the small muscles of the hands, attacking muscle-groups corresponding to segments of the cord. In myopathy the larger muscles are generally affected, while the small muscles of the hands escape. Amyotrophic lateral sclerosis tends to spread up to the bulbar nuclei, and to produce bulbar paralysis, while myopathy does not cause bulbar paralysis. In myopathy, some of the diseased muscles may be enlarged while others are wasted. Enlargement of muscles never occurs in nuclear disease. Fibrillary tremors which are so common in progressive muscular atrophy, are rare in myopathy; and finally, in myopathy, unlike amyotrophic lateral sclerosis, the tendon reflexes are never increased. In fact, in myopathy the knee-jerk may disappear from wasting of the quadriceps.

Gonorrhoea—Dr. J. P. Pappas reports in the Military Surgeon that he rid soldiers who had acute untreated and unsuccessfully treated gonorrhea with large doses of sulfathiazole tablets ground to a powder and mixed with sugar, water and evaporated milk. The cases cleared up rapidly. No symptoms were observed after 13.5 days of hospital observation Dr. Pappas believes that the soldiers who respond most rapidly to the treatment could have been discharged from the hospital the day following the administration of a single massive dose and might have been returned to duty in an average of 7.3 days.

WAR TIME PROBLEMS OF INDUSTRIAL HEALTH

C. D. Selby, M. D.
Detroit, Michigan

There are, or shortly will be, twenty million war workers in the United States, men and women of every age and degree of physical fitness, who, in the months to come, will make the airplanes, tanks, trucks, ships, guns, and munitions on which successful prosecution of modern warfare depends. Do you know that about 2¼ million of these war workers in this year of 1942 will incur disabilities averaging 35 days each, from respiratory, digestive, or other diseases of mankind or from injuries received on the streets, in the homes, and during recreation? Do you know that in this same year, an additional 3¾ million war workers will have been absent from their jobs anywhere from one to seven days because of colds, indigestion, and other common ailments not related to the work they perform? Do you know that women in industry, whose numbers are greatly increasing, absent themselves from work to a much greater degree than men—probably 60% higher? Do you know that 19% of these married women will have been pregnant during the year and that about 12% of these pregnancies will have terminated in abortion? I assume that you do know about this situation because you are the doctors who treat these war workers for disabling conditions of this nature. I do not believe you have stopped to consider to what extent industrial absenteeism from sickness and injury can be reduced through organized effort, and how much your own contribution in this direction will mean in terms of more planes, more tanks, and more guns.

About a year and a half ago, the Director of the Bureau of Industrial Hygiene in an eastern state health department was instrumental in introducing a system of sickness records in a good sized machine tool company. The plant was most cooperative since it recognized very promptly that it was only under some such system that causes of work absence could be properly analyzed. In a short time the conclusion was reached that considerable sums in lost wages and in shop production could be saved if more adequate industrial health supervision could be provided for the plant personnel. It was not long, therefore, before a full industrial physician and three full-time industrial nurses were employed to supply adequate industrial health services to approximately 2,500 workers.

This series of events aroused much interest elsewhere in this same industrial community and other smaller plants were impressed with the contributions which a well-organized medical service could make in lowering lost time absence from causes related to health. Since these plants felt unable individually to support a full-time physician, the local medical profession was consulted. It was suggested that individual practicing physicians could meet these new medical requirements if a plan agreeable to the employers and the doctors could be arranged. After lengthy discussions, a rotating scheme for personal visitation to these plants by physicians was hit upon, such visits to occur daily, to last at least an hour, and to occur at a definite time of day, usually in the morning.

It is interesting to report that frequently these physicians have become interested enough to spend more time in the plant than is actually required. The manner of rotation and all other medical policies, including payment for services, are made by the local profession, and recommendations are sent directly to the plants concerned. Each physician in the community can participate if he cares to, and most of them do.

This experience is interesting because it compresses into one brief case history a number of important and interesting relationships:

1. It exemplifies the growing recognition by industrialists of the value of industrial health service. Medicine has something that industry can use, provided a method is devised which the employer can support.

2. It supplies an answer, at least a partial one, to the question of how medical service can be brought to the small plant.

3. It demonstrates that good industrial health service can only be provided if those who supply the service are willing to spend time directly in the working environment.

4. It dramatizes the immensely improved relationships which are rapidly coming to exist everywhere between the three major classifications of physicians on whom the industrial medical activities

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largely rest:

A. The Industrial Hygienist, commonly associated with bureaus of industrial hygiene in state health departments whose functions are mainly investigative or consultative directly to industry and to the medical profession, as well as certain duties in relation to enforcement of public health and sanitary codes relating to conditions of work. Prevention of industrial disability, whatever form it takes, occupies a prominent place in his thinking. You have a very fine department here in Kentucky which deserves your support.

B. The Full-Time Physician serving in one or several plants, who exemplifies specialty practice in this field. He is concerned very materially with prevention in all of its aspects but in addition he must treat compensable disability and occupy himself with the many details of medical department administration.

C. The Private Practitioner in general or special practice who serves on call or part time. Best current estimates indicate that 80 to 85% of medical service to industry is supplied in this fashion. As such, it has been mainly remedial in character to such an extent that medium sized and smaller plants have been left without the considerable advantage of preventive industrial medicine and surgery.

Objectives and Program

The ability of the private practitioner to extend his interests into the field of industrial activity and to face new problems and altered relationships has engaged the complete attention of the Council on Industrial Health for many months, both singly and with the guidance and assistance of the Subcommittee on Industrial Health and Medicine of the Health and Medical Committee of the Federal Security Agency, the Division of Industrial Hygiene of the National Institute of Health of the U. S. Public Health Service, the Committee on Industrial Medicine of the National Research Council, and the Committee on Industrial Medicine of the Procurement and Assignment Service. For what follows I am largely indebted to Dr. C. M. Petterson, Secretary of the Council on Industrial Health of the A. M. A. From the very beginning the Council became convinced that its educational and other services could only become effective through whole-hearted cooperation with each state medical society. The Council has been in close touch with developments in the Kentucky State Medical Association through its own Committee on Industrial Health, and it is thoroughly convinced as the full implications unfold, that no committee in your State Association structure will be called upon to provide a higher type of leadership or will contribute more to the maintenance of medical standards in the face of rapidly changing social and economic developments. I hope you realize the importance of that challenge to your committee. It now becomes desirable and even imperative to extend this same type of cooperative organization into county medical societies to enable physicians to respond to the medical needs of industry in their own individual communities.

What kind of program do we have in mind? In the first place we must agree upon objectives. The purpose of medicine in industry is to promote the health and physical well-being of industrial employes. These objectives should be accomplished by:

1. Prevention of disease or injury in industry by establishing proper medical supervision over industrial materials, processes, environments, and workers.
2. Health conservation of workers through physical supervision and education.
3. Medical and surgical care to restore health and earning capacity as promptly as possible following industrial accident or disease.

Certainly no new principle is enunciated in this list of objectives but it does provide a foundation on which a superstructure of specific functions in industrial medicine can rest and can be so regarded with confidence by all elements in the medical profession.

In the second place we must define a little more in detail the actual medical needs of industry in terms of personnel and the specific functions which will bring to plants both large and small good medical service, satisfactory both to those who receive as well as those who supply these services. The Council on Industrial Health regards the following functions as essential to adequate industrial health service:

Each plant, regardless of size, should have access to:

1. A physician who takes a genuine interest in a properly conducted industrial medical department. He may supply his services as an individual in one or more plants, or as a member of a group of phy-

sicians, or as a member in a panel conducted under the auspices of a state or county medical society.

2. Good industrial health nursing. Industrial nurses with proper preparation, acting under the physician's immediate supervision or standing orders, will supply for many small firms the principal fundamental details of industrial health service.

3. Industrial hygiene services directed at the improvement of working environment and control of unhealthful occupational exposure, provided by physicians and others under the guidance and assistance of the specialized personnel in the state or local bureaus of industrial hygiene.

4. A plant health program which will include:

A. Good first aid, emergency, and subsequent medical and surgical care for all industrially induced disability.

B. Proper health supervision through physical examinations and health education.

C. Good correlation with family physicians and other community health agencies for the adequate management of non-occupational sickness and injury.

D. Good records of all causes of absence from work as a guide to necessary control and the establishment of proper preventive measures.

As this goal is reached (and enormous impetus is accumulating under the pressures of war industry and the expressions of influential people in the government, in industry and in labor) we can begin to feel that the quality of industrial health supervision is approaching reasonable uniformity—the quality only varying according to the size of the plant. To hasten this end the Council on Industrial Health has issued a series of pamphlets descriptive of Medical Service in Industry which include such titles as:

1. Outline of Procedure for Physicians in Industry. This is designed to acquaint the practicing physician with duties and relationships in industry—a most helpful and useful statement.

2. The Industrial Medical Department. A brief description of how to go about setting up a plant dispensary.

3. Plant Hygiene Studies. This emphasizes that no physician will make a real contribution unless he gets out in the plant and makes instructive suggestions about the prevention of harmful exposures, using necessary industrial hygiene consultation and study whenever necessary.

All of these publications and others on various aspects of industrial health are available on request from the Council office in Chicago or through your own state committee organization.

Next Steps

Recognition of the importance of industrial health unfortunately is not enough. We must try to adjust the medical requirements of industry, not solely to our willingness to serve, but willingness in the face of dwindling numbers of physicians who will be called upon to assume a very considerable expansion in other types of health activity. How can we supply more and more industrial health with fewer and fewer physicians? To do so requires medical organization of a very high order. Certain steps seem logical:

1. We must conserve as far as possible the few well-trained industrial physicians, hygienists, and nurses we already have. In addition to their ordinary duties, we must depend upon them to act as instructors of those recruits who are ineligible for military service, but who are willing to serve in industry as their most direct and powerful contribution to winning the war, and gentlemen, it is important. I am glad to report that the Directing Board of Procurement and Assignment agrees in principle with this concept, and steps are being taken which will conserve medical manpower in industry.

2. We must somehow make it as easy as possible for industry and the physician to get together on a basis which supplies adequate medical supervision, which places no excessive burden upon the time or energy of physicians, and which at the same time can be offered as a service within the means of the small employer. This certainly is a large but not impossible order. The essentials of industrial health which I have enumerated above can be applied to industry small or large, if community health resources are properly organized for it. A county medical society committee with suitable representation and with a clear picture of the modern objective of industrial health service could be of enormous usefulness. The full details of committee organization and activity are too lengthy for recital here, but complete information may be obtained through the Council on Indus-

trial Health in Chicago, or through your own State Society Committee.

3. We must find a way of persuading the employe, through effective health education, that final responsibility for his own well-being resides in himself, and that he must guard his health off the job as well as on it.

In spite of personal preference and the pressure of a thousand other duties, the American medical profession must take a greater interest in industrial medicine. Many of its important aspects, which only men trained in medicine can perform, have scarcely been explored. It is probably true of industrial practice more than any other important field of medical activity that personal initiative by individual physicians and medical organizations can make a most helpful, even notable contribution. Conversely, continued neglect, carelessness, or incompetence on the part of all of us can only lead to the development and adoption of other methods of supplying medical care and health supervision.

No where is leadership and diplomacy more sorely needed to see that the best interests of workers, employers, and physicians are understood and safeguarded.

DISCUSSION

Orlen Johnson, Chicago: Mr. President, most of you probably have not regarded Kentucky as an industrial state, but right now Kentucky is playing an important part in the production of war materials, just as every other section of the country is doing. To emphasize that, I want to remind you of the meeting that Dr. McCormack mentioned to be held October 9, under the auspices of the War Man-Power Commission. It is being held in Louisville. That in itself is significant of the fact that Kentucky has a part in the war production program.

Too many times physicians are busy taking care of sick patients and they don't realize the trends or the other social changes which are affecting their practices. Right now they are confronted with one of those times.

Dr. Selby mentioned that the War Man-Power Commission, the War Production Board, and all other governmental agencies are interested in the health of the worker. You have no doubt read reports in the papers of some of the emphasis that Mr. McNutt has placed on it. These statements are not nebulous in any sense. They have concrete plans for what they wish to be done, and it has resolved into the situation that the medical profession will do it or someone else will have to do it for us. Even above that is the fact that the lost time from ordinary sickness in industry does vitally affect war production.

We have accumulated enough experience so that we know today how the medical profession cooperate in improving health in industry, and it is a matter of prevention. We think that it is inevitable that people should be sick, and that is your business or profession—to treat them; but in relation to the war effort we know that this sickness can be reduced, and reduced very materially, and it is the responsibility of the medical profession and no one else to see that this program is carried out.

The Bureau of Industrial Hygiene in the Kentucky State Health Department has a very admirable program, and they do need the cooperation of the medical profession. We realize that this program of prevention in industry is new, but that does not release us from the responsibility of finding out what it is all about and cooperating to the fullest extent.

We received a letter yesterday from the War Production Board stating that they wished the names of the county and state committee on industrial health, for they expected to refer all industries to these committees in setting up and promoting a program of prevention in industry. Gentlemen, industry has felt the influence of the governmental boards, and apparently now they are going to call on the medical profession directly to cooperate in this program. Through your state society committee and through your Bureau of Industrial Hygiene all this information is available. There is going to be more activity in Kentucky, and it behooves you as members of the medical profession and with the responsibilities implied to respond to this demand. I say without any hesitation that next to military service the greatest contribution that physicians can make to this war is prevention of sickness and keeping the workers on the job in war production.

Major W. E. Doyle, Louisville: There is very little that I can say after the masterly paper read by Dr. Selby and the discussion by Dr. Johnson. I do believe, however, that I should take this opportunity to thank the medical profession of Kentucky for their very splendid cooperation with us in the past year. The medical profession as a whole has become gradually attuned to the necessity of an increased and increasing program for the improvement of industrial health.

I have some rather encouraging news received in the past two or three weeks, that one of our larger county medical societies will endeavor to sponsor a program for post-graduate education in industrial health for physicians and nurses, utilizing the facilities of the University of Louisville. I believe that will be a tremendous contribution to the improvement of the health of our industrial workers.

MILITARY ROENTGENOLOGY

ROBERT E. DOWNING, M. D.
Captain, M. C., Station Hospital,
Bowman Field

In World War No. 1 Roentgenology was still in an early stage of development as a medical specialty. At that time equipment was scarce, and, compared to modern apparatus, was very crude. Trained Roentgenologists were probably more difficult to obtain than x-ray apparatus. These few trained pioneers in radiology overcame many obstacles, and succeeded in giving medical officers a satisfactory training in the fundamentals of their specialty; these pioneers rendered a valuable service to their country.

During World War No. 1 the United States Army showed very little recognition of medical specialties. A graduate of a recognized medical school was considered eligible for a commission as a medical officer, and, if accepted into the service was assigned to duty without regard for any qualifications as a specialist. Exceptions to this policy were very rare. From the beginning of the present emergency there has been an earnest effort to classify medical officers according to their qualifications, and assign them to duties for which they especially qualified. This undertaking, simple as it may seem, presents many complicated problems; the greatest of which is probably lack of balance between the demand for specialists and the immediate availability of qualified specialists when needed. At the present time the solution to this problem is being greatly expedited by placing new medical officers in schools for the purpose of giving them basic instructions in the military routine. These groups of medical officers make available specialists, who can be assigned immediately, when their services are needed.

A recent bulletin published by The American College of Radiology estimates that 1163 Roentgenologists will be needed to fulfill the requirements of the Armed Forces by the end of 1942. At the present time there are about 800 Roentgenologists on active duty, of which about 600 are regular officers of the Medical Corps who have completed short courses of basic Roentgenologic training in the Army Medical School. This course consists of four weeks of intensive training in the fundamentals of Roentgenology. At the present time the Army Medical School is capable of giving this training to about 25 medical officers each month. The Committee on Military Affairs of the American College of Radiology has been recently advised that there is, at present, no unfilled demand for radiologists.

In the fixed hospitals of the Medical Department of the Army, the services required of a Roentgenologist do not differ greatly from the practice of Roentgenology in a civilian hospital. The equipment is generally very satisfactory and the x-ray department is usually provided with a well trained Civil Service technician. The scope of military Roentgenology is, necessarily, limited to male patients of a fixed age group.

A large majority of patients are for examinations of the chest. The United States learned an expensive lesson during the last war. Because of tuberculosis, expenditures in the form of compensation, hospitalization and vocational training are estimated at approximately $1,000,000,000 since 1918. Many of these veterans are still alive and are still drawing disability compensation.

Except for the men enlisted during the early stages of the present war effort, an x-ray of the chest has been a part of the regular physical examination. All officers entering upon active duty have had an x-ray examination of the chest. For mass Roentgenography of the chest, such as is carried out at induction stations, photography of the fluoroscopic image has proved to be the most practical and economical method. The method preferred by the Army is a technique resulting in the production of stereoscopic 4 x 5 inch photographs of the image of the chest as produced on the fluoroscopic screen. This method is adaptable to rapid production, greatly simplifies the problem of storage of films, and is about 80% less expensive compared to the cost of the usual 14 x 17 film used in conventional x-ray examinations of the chest. This method is not by any means considered superior to the regular 14x17 x-ray of the chest in diagnostic quality, but has been officially adopted by the Army as the most practical method of producing, and storing permanent records of x-ray examinations of the chest of 4,000,000 or more men. These men must again have an x-ray examination of the chest before discharge from the Army; this will necessitate the production of about 8,000,000 examinations, accord-

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ing to the present program. In some induction stations, and in most station hospitals, the equipment for the production of 4 x 5 inch films is not available, and the use of 14 x 17 films or 14 x 17 inch paper is still prevalent.

In the interpretation of x-ray films of the chest, the military Roentgenologist is required to list definite x-ray findings, and render an expression as to whether the findings are sufficient to disqualify the individual for acceptance into the military service, or whether or not deferment for further examinations is indicated. Probably most civilian physicians are not aware that the conclusions reached by the military Roentgenologist are not necessarily his own opinion, based upon his own training and experience. Possibly, quite contrary to his own opinion, he is forced to disqualify a great many men because of certain arbitrary standards set forth by Army Regulations. The purpose of this policy is to obtain a uniformity of opinion on certain common conditions encountered in routine chest examinations. An excellent example of such an arbitrary standard is the requirement for disqualification of applicants for commissions, because of a certain maximum number and certain limited size for areas of calcified residue from primary type tuberculosis. Another example is a maximum limit for the number of square centimeters of lung involved in an inactive adult type tubercular lesion, as demonstrated in two dimensions on a standard 14 x 17 x-ray film of the chest. If the decision of the acceptability of these eases were left entirely to the judgment of the individual Roentgenologist, there would be a wide variation in opinion on this very debatable subject. Applicants, who were considered disqualified by some Roentgenologist, would be considered acceptable by others, creating no end of confusion. The office of the Surgeon General has provided the military Roentgenologist with a common measuring stick for certain types of cases, and certainly some such arbitrary standard is essential for uniformity of decision.

In military Roentgenology, the rather high incidence of peptic ulcer is of interest. This is true in spite of the fact that a large percentage of patients examined are quite evidently malingerers, or "gold bricks," who would not have been sent for x-ray examination except for the purpose of ruling out the bare possibility of organic disease of the upper gastro-intestinal tract. The cause of this prevalence of peptic ulcer is, probably, that many recruits are mentally perturbed and homesick while becoming adjusted to military environment. It is a well known fact, in clinical medicine, that peptic ulcers frequently develope, and tend to recur frequently, during periods of mental anxiety.

At the present time troops are undergoing strenuous physical training. Aside from drilling, men under the age of thirty five years are required to take at least five hours of strenuous exercise every week. A large amount of this exercise is obtained on the obstacle course. These activities are closely supervised, but a small percentage of casualties do occur, and the military Roentgenologist is privileged to see a rather large number of fractures.

It is evident that the practice of military Roentgenology, in fixed hospitals of the Army, does not greatly differ from Roentgenology as practiced in civilian hospitals. The requirements and duties of Roentgenologists in and near the zone of actual combat is an interesting subject. Major Alfred A. de Lorimier, Director, Department of Roentgenology of the Army Medical School, presented a very excellent paper on this subject at the annual conference of the American College of Radiology, February 15, 1942. From this source the following ideas were obtained.

The medical unit, nearest the front line, which will be provided with Roentgenologic assistance, will be the surgical hospital. The surgical hospital is a mobile unit, which operates in the zone of medical battalion clearing stations 1 to 10 miles behind the front line and provides any type of emergency surgery for the wounded, who because of their condition cannot be evacuated further back to the evacuation hospitals. These casualties are received by the surgical hospital usually 4 to 15 hours after being wounded, and have already been given first aid treatment. The duties of the Roentgenologist, assigned to these units, will be confined to fluoroscopic examinations. Patients are moved to evacuation hospitals as soon as conditions permit.

Evacuation hospitals are usually located 30 to 70 miles to the rear of the front line, and have facilities for accommodating as many as 750 patients. Usually this unit is located in buildings which have been taken over, but may consist of tents. Evacuation hospitals are equipped with facilities

for making x-ray examinations, and giving x-ray treatments for infections. Two Roentgenologists will be assigned to each surgical hospital, and two to each evacuation hospital.

The organization of the medical department in and near the field of combat, as pointed out by Major de Lorimier, must be considered merely in a relative manner, because of the rapidity of movement of modern warfare. This paper was presented by Major de Lorimier about seven months ago, and makes no mention of the transportation of the wounded by air. However, the use of the ambulance plane will probably not affect the service of Roentgenologists as they will probably be used only for the transportation of the chronically ill and permanently disabled patients from evacuation hospitals to general hospitals far behind the zone of combat.

The American College of Radiology, The American Roentgen Ray Society and the Radiological Society of North America, are cooperating to the fullest extent with the Armed Forces in seeing that the demand for their specialty is kept filled. Roentgenology is playing an important role in the activities of the Medical Corps and there is every reason to believe that we will be proud of the service rendered to our Country in World War No. 2.

DISCUSSION

Capt. E. L. Pirkey, Fort Knox: There is very little to add to the broad outlines of the subject of Military Roentgenology as described by Captain Downing. However, from our great volume of work at Fort Knox, which in the past twelve months has totaled approximately 80,000 individual examinations on 60,000 patients, it is possible to fill in a few of the details in the brief time allotted me.

There is one main difference between civilian x-ray practice and that of the Army, in that, to the patients, the examination is free, which directly results in earlier and more frequent examinations and quite often we have an original negative film of the same person which gives us a comparison with his later pathological film.

As you all probably know, under the existing setup with a few exceptions, a soldier must either be able to do his full duty or be in the hospital, which means that we get disease much earlier and more of it than is the custom in civilian life. Practically every "bad cold" at Fort Knox is admitted to the hospital, and following the history and physical examination an x-ray film of any portion of the man's anatomy may be requested. The result of this early and frequent x-ray examination, particularly in regard to the chest, has taught us that many a patient who in civilian practice would most likely never be seen by a physician and whose total treatment would probably consist of Vick's salve and Sal Hepatica, would show on the x-ray film, if made in the first two or four days, a definite small area of pneumonic infiltration, most frequently in the inferior portions of the lung fields, with the usual hilar and peribronchial reaction. A good many of these patients never run a temperature in excess of 102° F. and have a general malaise, a tightness of their chest, with or without pleuritic pain, and most all of them have a dry, non-productive, extremely disagreeable cough. All patients with positive chest x-ray findings must have a negative report on their chart before they can be discharged from the hospital. As a result, in some cases, their weekly recheck films begin to show repeatedly the same report, namely, "An increase in the size and density of the inferior portion of both hilar shadows with an increase in the basal peribronchial markings bilaterally with some small areas of peribronchial infiltrate in both bases." So, in an attempt to shorten the hospitalization of these cases, frequently following a period of normal temperature and repeated similar x-ray findings as described above, iodized oil is instilled into the bronchial tree and the usual bronchogram made and read. It has surprised us to find a relatively high incidence of bronchiectasis in this younger age group, and it is certain that the medical officers at our hospital will be considerably more on the lookout for this condition when they return to civilian practice.

Another difference between civilian and Army x-ray practices is that concerned with the examination of supposedly healthy men at the time of their entrance into the military service. This mass survey of individuals is gradually becoming more popular in the non-military realms, principally as a result of the case finding work of the National Tuberculosis Association and many large industrial concerns, but it has reached its peak in the past year in Army x-ray practice, due to the opening of the second phase of the World War. As the Captain has previously explained, the Government and principally the taxpayers have been bitten badly because of pulmonary tuberculosis since the last great citizens' army was demobilized. The Veterans' Administration has estimated that each tuberculous soldier in the past has cost the Government on an average of $20,000 apiece, so as a result the Surgeon General has set up very rigid speci-

fications in regard to chest x-ray findings that each embryonic unit of the fighting machine must meet. Another very good reason for such rigid standards is the fact that these induction examinations are being given in thousands of Army posts and civilian communities throughout the nation and there are not a sufficient number of qualified radiologists to go around. These chest standards are admittedly arbitrary but serve to produce uniformity and prevent an individual from being disqualified by one physical examination board and passed by another, which would result in a very unsatisfactory condition.

I show you these slides which will demonstrate graphically the standard set up by the Surgeon General as a result of the aforementioned reasons, for the information and guidance of all those whose duty it is to interpret induction x-ray films, and I show them because we have had so much trouble with patients being turned down by the Army and going home to their family doctor and saying they were turned down by the Army. The doctor makes an x-ray of the chest and tells the patient there is nothing wrong with his chest, which makes for an unfortunate situation as regards mutual understanding, so maybe the following official criteria which must follow will help explain our side of the case

The Army Roentgen Criteria of Pulmonary Tuberculosis are divided into two phases. The first phase in primary. Under that we have definitely active, which consists of:

1. Pneumonic consolidation, isolated or few (usually located in hilar or mid-zones; possibly lobar or miliary).

2. Enlarged lymph nodes, (usually located in hilum; possibly paratracheal mid-lung zones, or cervical).

3. Cavitation.

The next would be the unstable lesions, which are:

1. Residual parenchymal consolidation (possibly showing central calcific density but a periphery of lesser densities fading into those of normal parenchyma.

2. Stippling of calcific densities (either in parenchymal lesions or in lymph nodes.)

The next is the stable, classified as acceptable and unacceptable, and the acceptable are:

1. Parenchymal nodulation (usually calcific in density), provided there are no more than 10 such, and provided no more than one of these has a diameter as great as 1.0 cm., the others having no larger diameter than 0.5 cm.

No. 1 under unacceptable is merely the corollary of the acceptable; that is, if there are more than 10 or larger than 1.0 they are unacceptable.

2. Residual lymph node densities (calcific) provided there are no more than 5 such and provided their diameters are no greater than 1.5 cm., and the corollary of that under unacceptable: lymph node densities, multiple, more than 5 in number or if a diameter of any one is greater than 1.5 cm.

3. Pleural cap without underlying parenchymal lesion of significance.

4. Diaphragmatic tenting without underlying parenchymal lesions of significance.

The next slide shows the unacceptable types of pulmonary tuberculosis under the reinfection phase, the secondary phase.

Under the definitely active, unacceptable: (1) Hazy, strand-like, and diffusely nodular densities in the lung parenchyma, (2) Bronchopneumonic or lobar consolidations, (3) Cavitations, (4) Pleural effusion, (5) Pneumohydrothorax.

Under the unstable, unacceptable: (1) More or less sharply demarcated strand-like densities infiltrating a volume of lung parenchyma which when projected into a standard 14 x 17 inch roentgenogram would measure more than 5 sq. cm.

2. Pleural thickenings of such degree as possibly to obscure a dormant infection.

Prior to January of 1942 the Army had had absolutely no dealings with reinfective type phase of tuberculosis; that is, they were absolutely unacceptable. In January of this year for the first time, this particular group of definitely reinfective type tuberculosis were given the opportunity to become members of the armed forces, with the signing of a waiver.

3. Reinfection, acceptable: Sharply demarcated strand-like densities infiltrating a volume of lung parenchyma which when projected onto a standard 14 x 17 inch roentgenogram would measure less than 5 sq. cm. and which has shown no progression or regression in size or appearance after an interval of six months.

It should be pointed out that the Army emphasizes the point that even regression of the size of the lesion is considered evidence of activity in a period of six months.

Capt. Robert E. Downing, (in closing): I merely want to thank Captain Pirkey for clarifying this problem of acceptable chests, because we are rather on the spot in this regard. The family physician often examines them or sends them to a well-qualified radiologist who sees no reason why they are not fit material for the Army, but we have to abide by the standards set for us, and setting that standard must have been quite a problem.

Another example similar to this is requirements for disqualifying a man with scoliosis who has a deviation of his spine of two inches or more. It is rather difficult to decide just where that measurement should end for acceptability, as to whether it should be one inch, one and a half, two, or three, but something of that nature is necessary.

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COUNTY SOCIETY REPORTS

Campbell-Kenton: The regular meeting of the Campbell-Kenton County Medical Society was held at Speers Hospital on Thursday, January 7, with nine members present. In the absence of the president the meeting was called to order by the Vice President, Oscar Frickman, at 9:15 P. M. The minutes of the previous meeting were read and approved.

A communication was read from R. E. Wehr of the Campbell County Health Department relative to a meeting on Syphilis to be held at the Carnegie Library, Covington, on January 11, 1943.

Y. Sasaki was elected a member of the society by secret ballot.

The question of payment of dues for those in the armed service was raised. A review of the minutes shows that at the May 1, 1941 meeting a new classification was made for these men. They are to be listed as inactive members; as such, to be exempted from the payment of dues while in service; and that on their return to this society they shall again become active members by the payment of the current year's dues.

The program of the evening consisted of an excellent talking picture on "Peptic Ulcer" shown through the courtesy of the John Wyeth & Brother.

Dr. Martin Sauter, Newport, died suddenly January 2, 1943. In addition to an active practice he was also coroner of Campbell County.

After some discussion, there being no further business, the meeting was adjourned.

R. L. Biltz, Secretary.

Jefferson: The 856th stated meeting of the Jefferson County Medical Society was held Monday evening, January 4, with 70 members and guests present. The president called the meeting to order at 8:05 P. M.

The Secretary read the minutes of the previous meeting and they were approved as read.

New members elected are: Norvin L. Casper, Michael R. Cronen, David A. Dukes, James H. Hester, Warren S. Rehm, Edwin P. Scott and Bessie T. Strongman.

Dr. Gradie Rowntree announced that Dr. Udo J. Will, now Medical Director in the U. S. Public Health Service, is in Kentucky for a short period as Advisory Consultant to the medical profession in the clinical management of syphilis. On Tuesday, January 5, he will address the medical students and staff, in the Amphitheatre from 12:00 to 1:00. From 2:00 to 4:00 there will be a conference with physicians in the Louisville area. Any of the members who care to come are invited.

Scientific Program: 8:10 P. M.

Clinical Presentations and Their Therapeutic Care, by the Resident Staff. The President asked Dr. John Walker Moore to take charge of the program. Dr. Moore introduced the essayists.

1. Influenzal Meningitis, E. P. Scott, (Case presented.) Questions by Doctors Virgil Simpson and Austin Bloch.

2. Skin Grafting, (Three cases presented.) A. B. Ortner. Questions by Doctors Irvin Abell and Virgil Simpson.

3. Twist of Ovarian Cyst on Its Pedicle. (Case presented.) G. W. Bryant. Questions by Doctors Irvin Abell, Uly Smith and Bessie Strongman.

4. Certain Phases in the Treatment of Diabetes. (Case presented.) F. H. Hathaway. Questions by C. W. Dowden, Jr. and Austin Bloch.

5. Spinal Anesthesia with Pontocaine. S. S. Clark. Questions by Irvin Abell and J. W. Moore.

Adjourned 9:20 P. M.

M. F. Beard, Secretary.

Letcher: The Letcher County Medical Society held its regular and last meeting of the year in the waiting room of Drs. Bach and Pigman, Whitesburg Bank Building. December 29, 1942. President E. G. Skaggs called the meeting to order 7:30 P. M. Members present were: E. K. Munn, H. H. Houze, T. M. Perry, F. L. Wommack, J. W. Turner, Jenkins; M. W. Anderson, McRoberts; T. R. Collier, R. D. Collins, B. C. Bach, Owen Pigman, Whitesburg. Reading of minutes of previous meeting and all business except election of officers were dispensed with.

The following officers were elected for the year 1943: R. Don Collins, President; E. C. Schofield, Fleming; Vice President, Bert C. Bach, Secretary and Treasurer.

The President-elect gave a short talk in which he commended E. G. Skaggs for his efficient work as past President and pledged himself to work for the good of the society through the coming year.

Meeting adjourned to take up unfinished work at next regular session, January 26th, 1943.

Owen Pigman, Secretary

Pulaski: I regret to report the death of T. M. Garner, Somerset, the first week in December, 1942. He had been practicing in this county for thirty years and will be greatly missed by all his patients and this society. He died of coronary occlusion.

Robert G. Richardson, Secretary.

NEWS ITEMS

The American Association of Obstetricians and Abdominal Surgeons announces the following rules governing the Foundation Prize:

(1) "The award which shall be known as 'The Foundation Prize' shall consist of $150.00."

(2) "Eligible contestants shall include only (a) interns, residents, or graduate students in Obstetrics, Gynecology or Abdominal Surgery, and (b) physicians (with an M.D. degree) who are actively practicing or teaching Obstetrics, Gynecology or Abdominal surgery."

(3) "Manuscripts must be presented under a nom-de-plume, which shall in no way indicate the author's identity, to the Secretary of the Association together with a sealed envelope bearing the nom-de-plume and containing a card showing the name and address of the contestant."

(4) "Manuscripts must be limited to 5000 words, and must be typewritten in double-spacing on one side of the sheet. Ample margins should be provided. Illustrations should be limited to such as are required for a clear exposition of the thesis."

(5) "The successful thesis shall become the property of the Association, but this provision shall in no way interfere with publication of the communication in the Journal of the Author's choice. Unsuccessful contributions will be returned promptly to their authors."

(6) "Three copies of all manuscripts and illustrations entered in a given year must be in the hands of the Secretary before June 1st."

For further information write the Secretary, Jas. R. Bloss, M. D., Huntington, W. Va.

BOOK REVIEWS

THE NATIONAL FORMULARY, 7th Edition—(N.F. VII). Prepared by the Committee on National Formulary by Authority of the American Pharmaceutical Association. Official from November 1, 1942. Published by the American Pharmaceutical Association, Washington, D. C., Mack Printing Company, Easton, Pennsylvania.

This 7th Edition of the National Formulary is a complete revision of the 6th Edition. The standards prescribed in the National Formulary apply only to substances that are sold or dispensed as drugs or used in the preparation of drugs or in the testing of drugs for quality, purity and strength or in connection with medical practice.

The standards set forth in this volume are of interest to every physician and pharmacist in active practice. The standards of this edition become standard under the Federal Food, Drug and Cosmetic Act and state laws on November 1, 1942.

WOMAN'S AUXILIARY PAGES

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DOCTORS DAY OBSERVANCE

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HONORING ALL PHYSICIANS IN KENTUCKY
WITH SPECIAL RECOGNITION THIS YEAR FOR

William Adair McDowell, M. D.

(1795—1853)

Author Of

A Demonstration of the Curability of Pulmonary Consumption In All Its Stages. Comprising An Inquiry Into The Nature, Causes, Symptoms, Treatment and Prevention of Tuberculous Diseases In General. Published, 1843

Brief Sketch of the Life Of WILLIAM ADAIR McDOWELL (March 21, 1795—December 10, 1853)

Mrs. A. T. McCormack, Louisville

Dr. William Adair McDowell, a cousin of The Great Ovariotomist, was born in the home of his parents, near Harrodsburg, Mercer County, Kentucky, on March 21, 1795, the fourth son of Samuel McDowell and Anna Irvine McDowell. He attended the neighborhood schools near Danville. When nineteen years old, he went to Washington Academy—the beginning of Washington and Lee University—at Lexington Virginia, with a letter from his father addressed to General Andrew Reid, Lexington, Virginia, dated April 14, 1814, which reads, in part, as follows:

"My son, William, will hand you this.

I have sent him to Washington Academy to stay for one year. - - - He has been living with Dr. Ephraim McDowell for twelve months past, studying medicine. I wish him to study science, and intended sending him to the University (Transylvania) at Lexington, Kentucky; but the fever has been so fatal there, and still is, and parties so violent, that I have sent him to your country."

Soon after arriving at Washington Academy, however, he enlisted in the Army in the War Against England but peace was restored before he saw actual service. Back he went to Danville and continued his studies with Dr. Ephraim McDowell. In 1817, he went to the University of Pennsylvania in Philadelphia. He writes: "Deeply interested (in the pathology of phthisis—tuberculosis) because I was, in early life, a subject of phthisis. When attending my last course of lectures at the Pennsylvania University, I was in an advanced stage of the disease - - - a classmate from Virginia, then in a more advanced stage of consumption than myself - - - often conferred (with me) on the subject of the malady. We investigated it to the full extent of the then revealed knowledge of the disease and, as well may be supposed, with no ordinary interest - - - - - We concluded - - - - upon a plan which we had ourselves determined to adopt, consisting of a course of dietetics and regimen - - - We recovered rapidly and effectually, - - - he kept more faithfully to our plan than I; mended faster and consequently was the first recovered.- - - This disease had been destructive to many members of our respective families. When we commenced this process of treatment we were much emaciated - - he - extremely so. In the first year, we improved considerably, gained flesh and assumed healthy complexions. At the expiration of four years, I had become comfortably fleshy; he had become fat."

His diploma from the Medical College, University of Pennsylvania acquired, Dr. William Adair McDowell returned to Danville and renewed his work with Dr. Ephraim McDowell now as a partner in the practice of medicine.

On August 24, 1819, Maria Hawkins Harvey, daughter of Matthew Harvey and Magdalen Hawkins Harvey, became the bride of her kinsman, Dr. William Adair McDowell, and they made their home in Fincastle, Virginia, where he developed a successful practice.

In 1838, they removed to Louisville, Kentucky, where Dr. McDowell enjoyed a steadily growing practice. But he aroused the animosity of the profession by his unusual claims of curing tubercular patients, backed by his success in doing so. His repeated assertion that tuberculosis could be cured seemed preposterous. But, outrageous, indeed, was his stated belief that tuberculosis could be prevented. Why, tuberculosis is hereditary, they all vowed, had always been hereditary!

A progressive citizen, Dr. William Adair McDowell, advocated better, more complete education for men entering the practice of medicine. He maintained that a physician should be a well-educated man. He was one of the Louisville physicians who attended that

historic medical meeting held in Frankfort, January 11-12, 1841. (See Kentucky Medical Journal, June, 1940. pp 242-251.) Here, he presented, for the approval of the body, "A Memorial, Addressed to the Legislature of Kentucky, For The Suppression of Quackery." Included is the requirement that "every administerer of medicines shall set forth in intelligible English, Latin, or technical terms, the constituent, or if a compound, the constituents--" and "—for failure in which he shall forfeit and pay $——— (a fine) for each and every offense." No vote was taken on this Report, or Memorial, but vigorous protest against him and this Memorial appeared in the columns of the Louisville Daily Journal during January and February of 1841. Many loyal friends stood by Dr. McDowell, however, including Dr. Samuel D. Gross.

When Dr. McDowell's book of 269 pages, entitled; A DEMONSTRATION OF THE CURABILITY OF PULMONARY CONSUMPTION IN ALL ITS STAGES. COMPRISING AN INQUIRY INTO THE NATURE, CAUSES, SYMPTOMS, TREATMENT, AND PREVENTION OF TUBERCULOUS DISEASES IN GENERAL, was published in Louisville, 1843, by Prentice and Weissinger, a storm of criticism and protest descended upon Dr. McDowell. Included in this book is a letter from Benjamin Dudley.

Here, we quote from AN APPRECIATION OF DR. WILLIAM ADAIR McDOWELL, FIRST TO HOLD TUBERCULOSIS CURABLE, by Dr. George P. Sprague, Lexington, published in the Lexington Herald with the permission of the Fayette County Medical So-

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ciety: "Briefly, the attitude toward tuberculosis of the leaders of medical thought of this day. The Babylonian cuneiform tablets indicate that tuberculosis was well-known in the very dawn of history, but so baffling was the disease that the account given of it by Hippocrates 400 years B. C., remained the last word for 1400 years. Even as late as 1650, Sydenham, in writing of it, largely reflected the views of Hippocrates and Galen. The great Benjamin Rush gave an impetus to the treatment of tuberculosis by bleeding, purging, etc., which lasted for 50 years after the Revolutionary War. This depletive treatment, probably aided by the growth of cities, and other changes in modes of living, had caused an increase of mortality until Dr. McDowell estimated that one fifth of all deaths were caused by it. This was moderate, as at about the same time, Louis put the mortality at one fourth and Sir James Clark at one third of all deaths.

These, then, were the conditions when Dr. McDowell wrote his book—and cured his patients. Tuberculosis was treated by bleeding and purging and blisters applied to the spine and chest, and the profession (quite naturally) believed that tuberculosis was not curable."

A review of Dr. McDowell's book will convince the reader that the present-day treatment of tuberculosis including the open air, good nourishing food with plenty of milk, and

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"graduated exercise" were all an important part of his treatment of tubercular patients. He says on page 228: "In cases of the constitutionally predisposed, and of convalescents, change of diathesis may generally be rested principally upon the proper regulation of regimen, dieting, etc.: and resort to medicine should, as much as possible, be avoided." And, on page 231: "—milk, the only article which Nature has furnished expressly for food; for, milk is the first, the unsophisticated craving of all animals under the influence of instinct." "Milk, then may be assumed as the standard for a healthy diet." Many of the treatments and procedures contained in his book are not recognized as desirable, today, but these cited above, are an important part of present day procedure. On page 215, he begins the chapter on Prevention Of Consumption with these words: "However curable consumption may be, its prevention is a paramount consideration—" Who, if any one, preceded him with such a statement? The writer will appreciate information on this subject.

Dr. Sprague concludes: "In face of all opposition and against all authority, Dr. McDowell had the hardihood to denounce bleeding for the treatment of tuberculosis and to publish a most revolutionary system of treating it, and to cure patients in all stages of the disease. And—what was this wonderful treatment that accomplished the hitherto impossible? It was iron tonics, rich easily digested foods given, preferably, four times, daily,



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with special care to conserve the digestion, outdoor air, graduated exercise - - - Very simple all this sounds, but he must be a recent graduate indeed, who cannot recall the time when such treatment would have sounded unusual to him."

Dr. William Adair McDowell was appointed to a chair in an Indiana Medical College but no record was found that he had served.

On March 16, 1852, the Surgeon-General of the United States Public Health Service appointed him in charge of the building of the Marine Hospital in Evansville, Indiana. But, he did not live to see the building completed as "he died of heart disease" in Evansville on December 10, 1853.

Doubtless, further research will bring to light many interesting facts concerning the useful life of this physician of Kentucky.

REFERENCES

A Demonstration of the Curability of Pulmonary Tuberculosis In All Its Stages, by William A. McDowell, M. D. Kentucky Medical Journal, June, 1940.

(Following secured from files of Miss Louise Morel)

History of Kentucky—1803-1938, by Samuel Wilson. Vol. 2.

Historic Families of Kentucky, Thomas Green.

An Appreciation of Dr. William Adair McDowell, by George P. Sprague.

Louisville Daily Journal, January, February, 1841.

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This review results from a study supported by the Wine Advisory Board, an agricultural industry administrative agency established under the California Marketing Act, and has been sponsored by the Society of Medical Friends of Wine.

Members of the medical profession are invited to write for this monograph. Requests should be made to the Wine Advisory Board, 85 Second Street, San Francisco.

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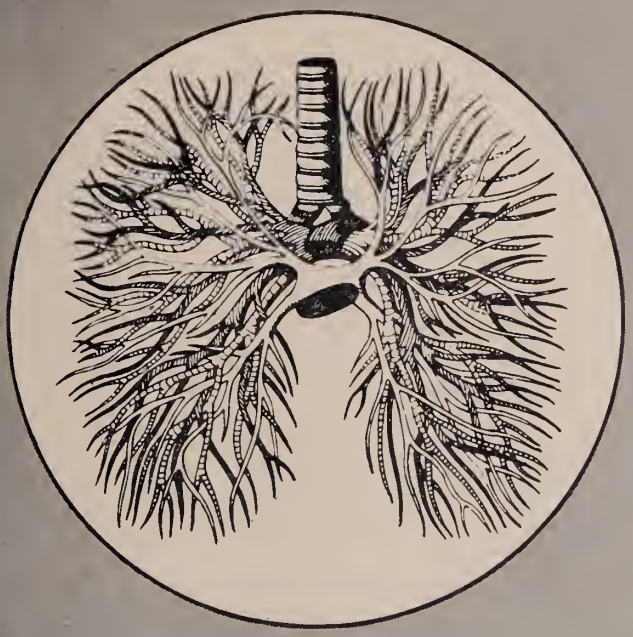
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* *Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154*
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Proc. Soc. Exp. Biol. and Med., 1934, 32, 241
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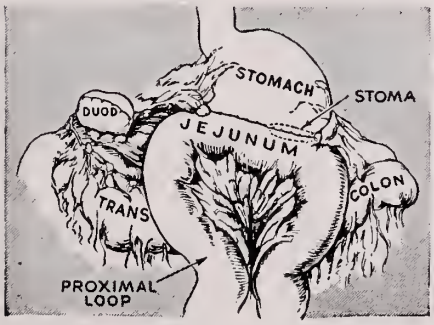
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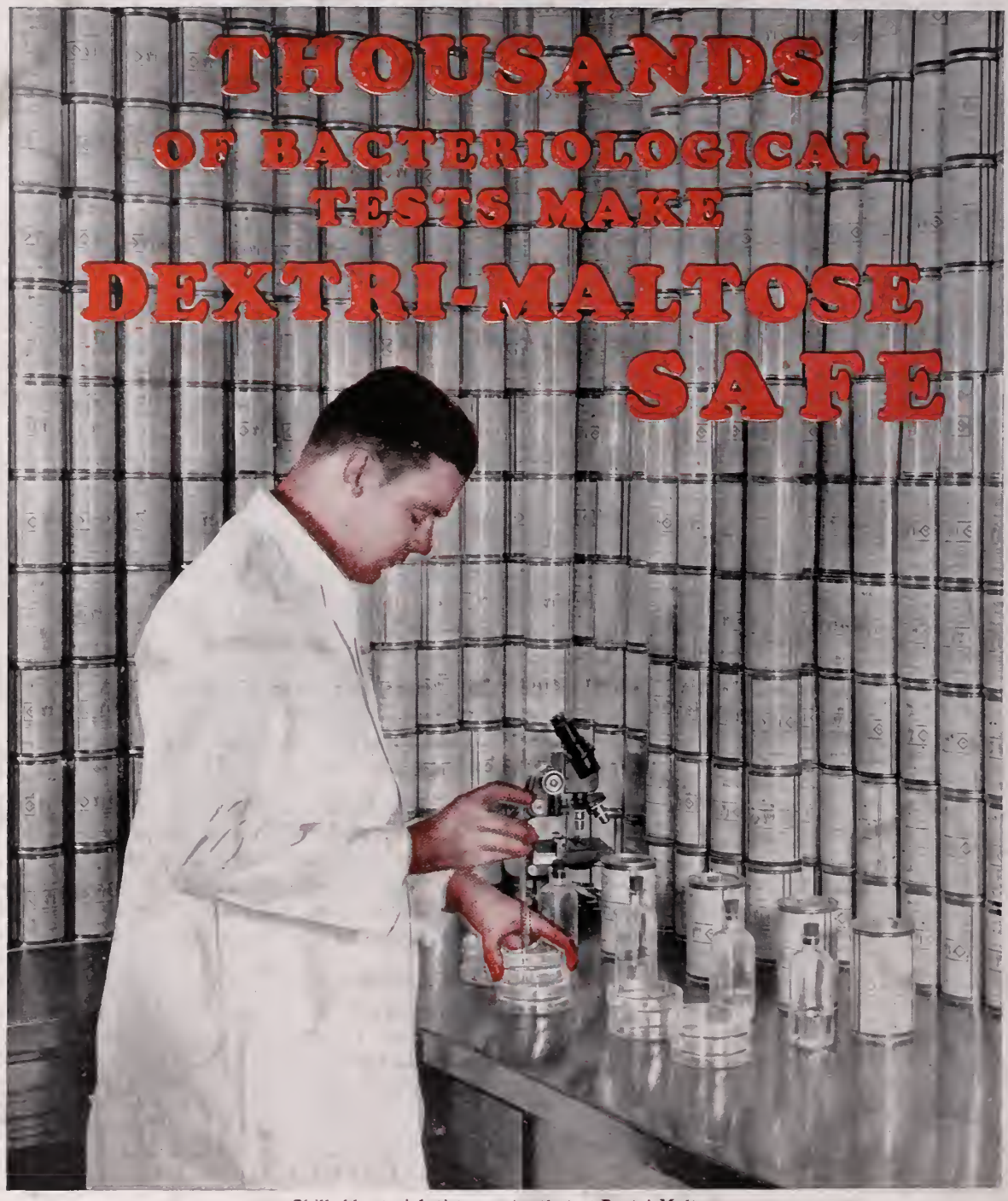
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2. *Marshall, S. F., and Devine, J. W. Jr.;* Gastrojejunal Ulcer, S. Clin. North America, 743-761 (June) 1941.

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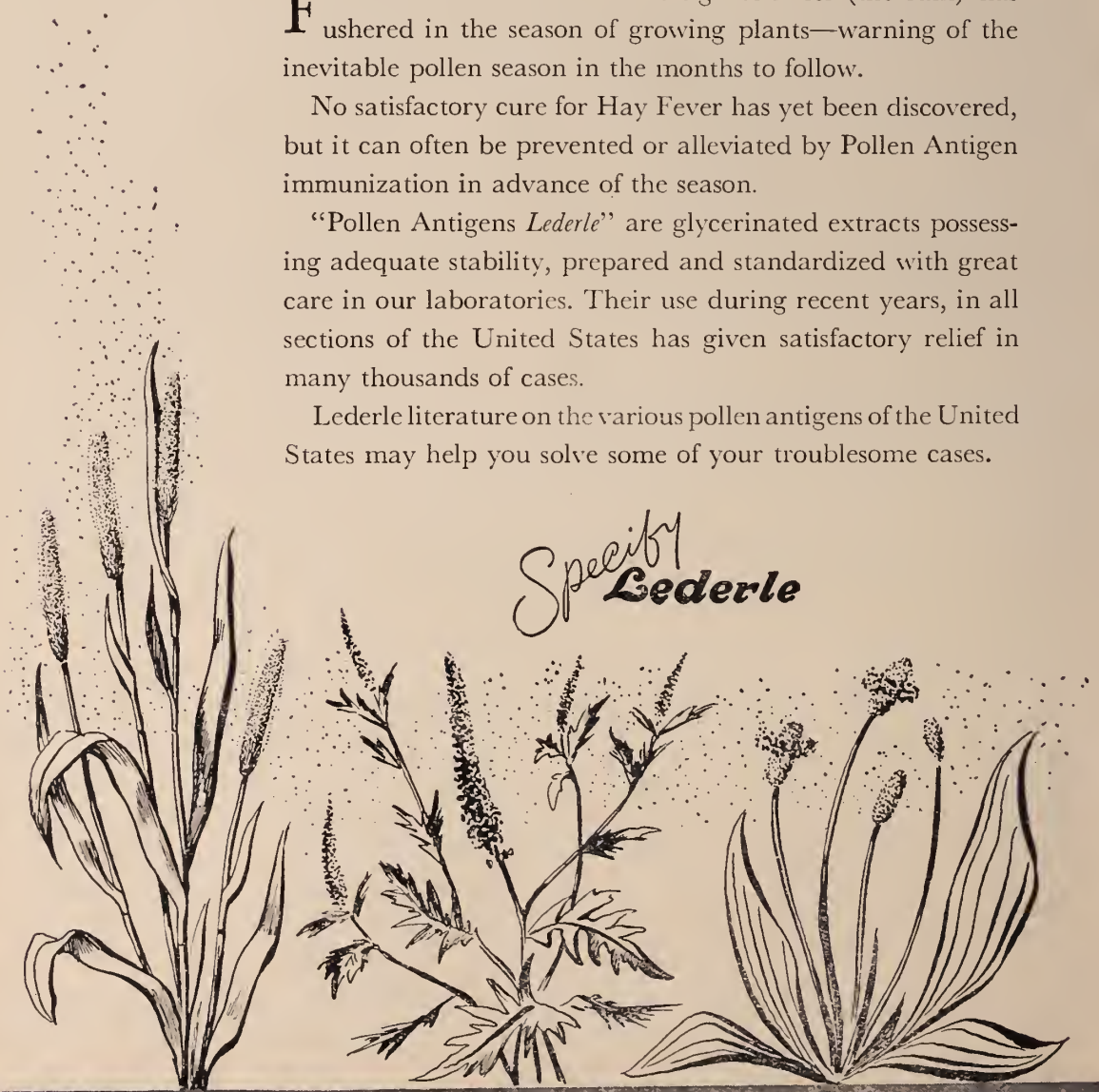
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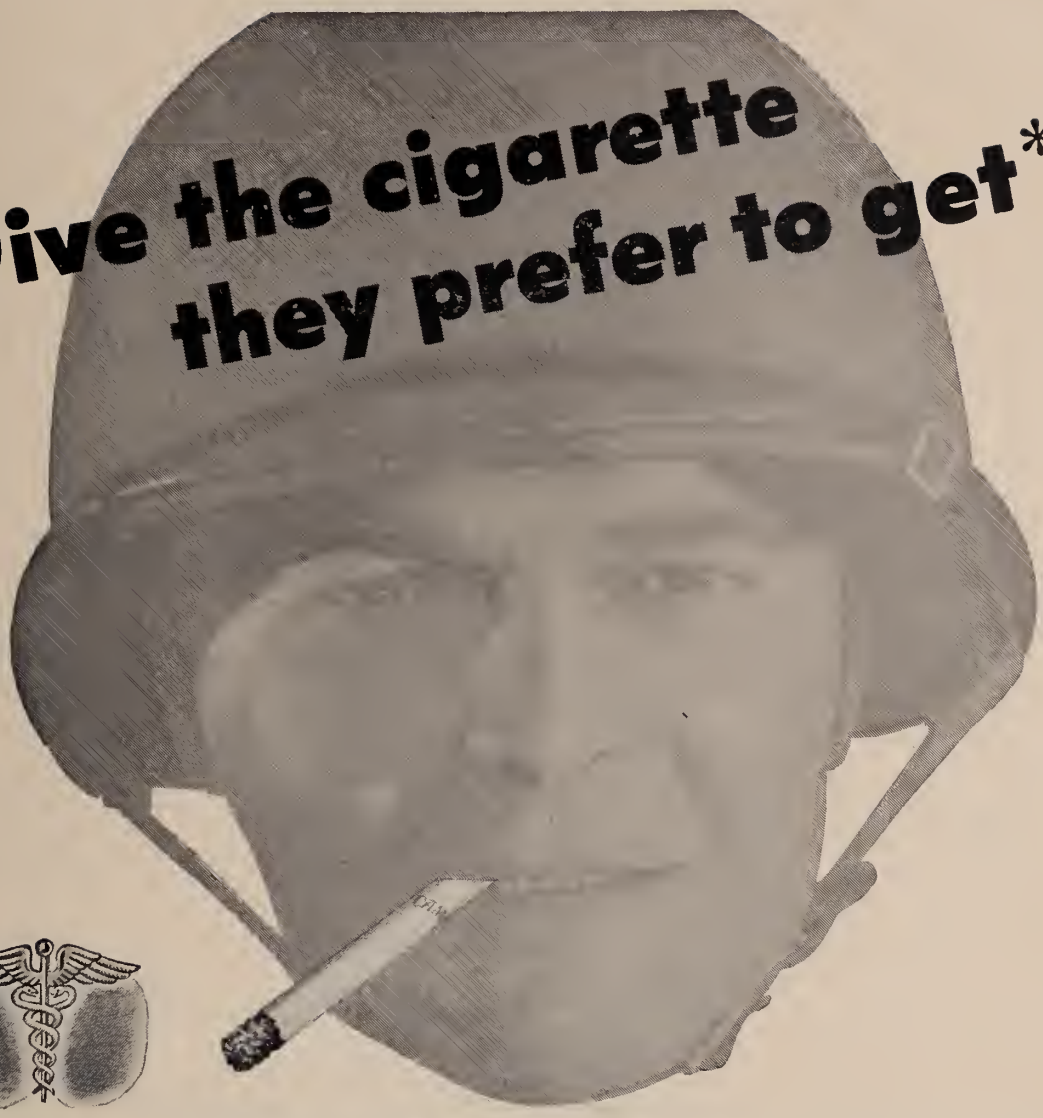
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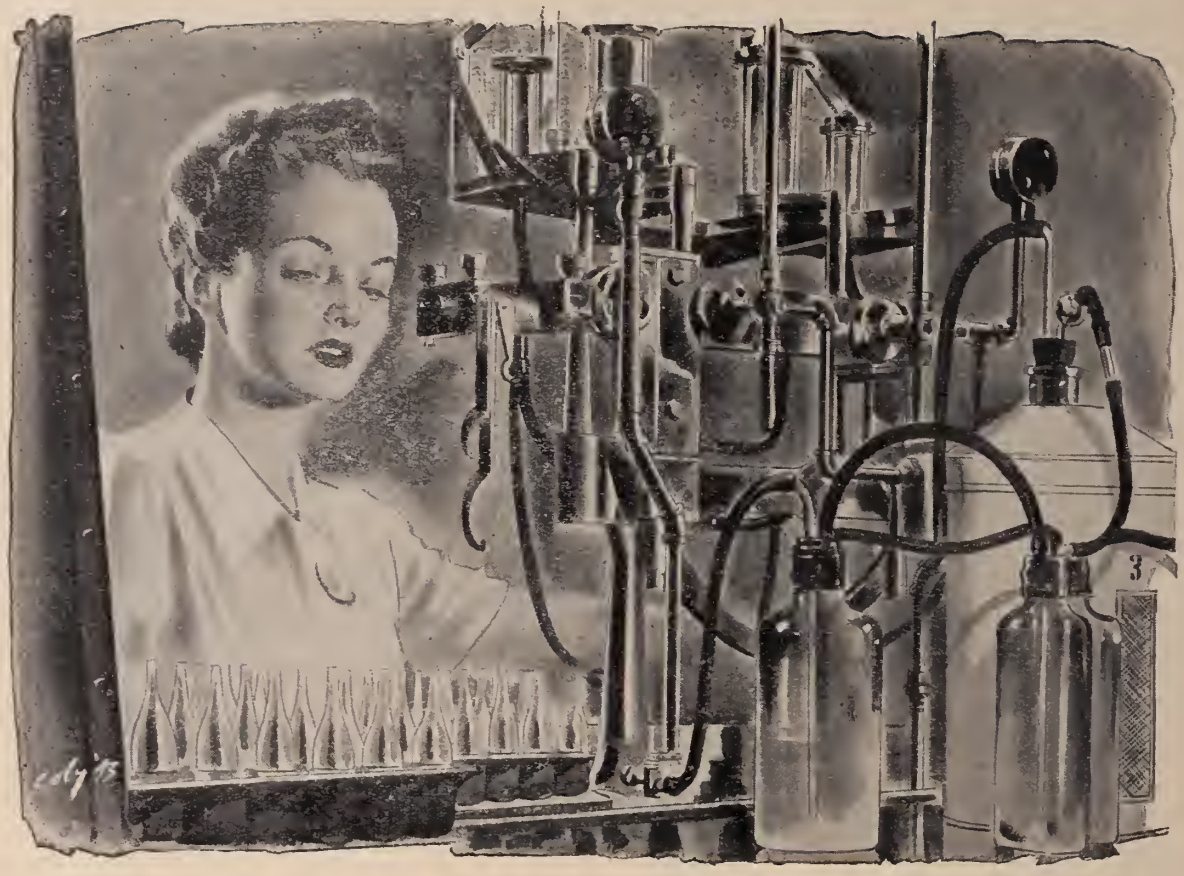


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KENTUCKY MEDICAL JOURNAL

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CANCER CONTROL

April has been designated as Cancer Control month. During this month 225,000 volunteer members of the Women's Field Army of the American Society of the Control of Cancer will carry on its Seventh annual campaign to enlist fighters against one of man's greatest enemies. The Journal is glad to contribute advertising space to aid in this important campaign.

Cancer takes an annual toll in the United States of 160,000 men, women and children. All too many people are willing to accept the disease as something about which little can be done; all too many people are disposed to regard it as an enemy that cannot be defeated. The fact is that not only can much be done but much is being done. Thousands of people today are leading happy, useful lives because of the cures that have been effected by the timely use of surgery, X-ray or radium in the treatment of the disease. Cancer is curable if detected in time and properly treated.

The three essentials of cancer control are research, diagnosis and treatment, and education. Constantly increasing effort is being devoted to the research phase of the problem; facilities for diagnosis and treatment are being constantly expanded, and the Women's Field Army of the American Society for the Control of Cancer is making steadily increasing progress in educating the public to the importance of being on the alert for the first appearance of cancerous symptoms; of having a periodic physical check-up and of consulting their physician early. It is doing valuable work as a liason organization between the general public and the medical profession. It is entitled to, and should receive, the hearty and active cooperation of the general public and the profession.

Several prominent surgeons in our metropolitan area have consented to speak before our medical organizations during this Cancer Control month of April, and if any society is interested in having a meeting, the office of the State Medical Association will make arrangements and will also supply posters and free literature.

THE IMPORT OF RHEUMATISM

The importance of rheumatism as a factor in the morbidity and mortality in this country has not been fully recognized or appreciated. It is doubtless true that certain sections of the country do suffer from a higher incidence and from severer forms of rheumatism. The north east states and especially those along our seaboard have been made aware of the dangers that attend rheumatism because in these states the death rates from rheumatism and organic heart disease have been sufficiently large to attract attention, but even where the death rate has not been so outstanding there has been a high morbidity rate which is a matter of concern and for which there has been a growing demand for a more comprehensive approach to the diagnosis and treatment of this protean disease. Some of the symptoms and complications which are quite common on the eastern seaboard are relatively rare and often overlooked in the warmer and drier states. The increasing toll in the death rate which is being played by heart disease which has become the greatest one factor in the death rate, gradually having passed those due to tuberculosis, cancer, pneumonia and the other great captains of death, necessarily attracts the attention of all physicians and vital statisticians. It is conceded that deaths due to heart disease include many factors such as congenital defects, coronary occlusion, trauma, traumatic injuries, overwork, malnutrition, yet there are a number of deaths which result directly from the effects of rheumatism on the heart. A complete survey on the importance of heart disease must include also a study of the disability and death which it causes and therefore should include not only the diagnosis of the obvious, but also of the less obvious manifestations of the disease and envision the effort to prevent and also to minimize, as far as possible, the evil effects of this widespread disease. The exigencies of the war program have also focused attention upon the loss of man power hours a large

proportion of which is attributable to the effects of rheumatism.

There is no question that the invasion of rheumatism is higher in the childhood years, though the proportion of cases of rheumatism will be higher in adult life on account of the children who have managed to live through the attack of rheumatism and the incidence of many chronic rheumatoid and heart lesions which have gradually accumulated as the years go by. It is to be noted also that many subclinical infections may gradually produce degenerative changes in one or more muscle fibres until the accumulated damage has reached the point where life is no longer possible.

At the outset of our study, unfortunately, we are confronted with the inability to determine the exact cause of rheumatism. The oldest medical writers and the examinations of mummies of as much as 5000 years ago, reveal the fact that rheumatism was even then an important disease. When our research workers have elucidated the cause of rheumatism we shall begin to plan methods by which we can not only cure the disease, but prevent its incidence. Up to the present, no virus, no plasmodium, no bacteria, and no combination of these has been accepted as the cause of rheumatism. But some strains of the streptococcus have been isolated in a sufficient number of cases to make us feel that they are an important factor and one which must be reckoned with in any study of rheumatism.

We should expect then that the early manifestations of rheumatism, if it is due to an infectious agent, would be found in children. The many vulnerable tissues of skin, lymphatic glands, mucous membranes, the intracellular spaces which characterize childhood offer easy points of attack for infectious or other types of invasion, and the child has not had time to develop any immunity or a mechanism protective against such organisms. The most tenable, though unproven, theory of the mode of attack of rheumatism is that a focus of infection of some type, minute rather than general, produces a toxin, which toxin causes the various localized symptoms of rheumatism. Certainly this concept has helped us to control the severity of symptoms and lessened the incidence of involvement of the heart and shortened the febrile period as well as mitigated the pain. Undoubtedly cold, damp climates, homes that are damp, dark, insanitary, and overcrowded are predisposing causes which are removable, but multiple incidences in certain families suggest other factors not so obvious, such as inability to resist infections, heredity, predisposition, frequent contacts, a vitiated nutritive diet or other unhygienic factors. The onset of an attack of rheumatism is usually undramatic. There will be some rise in temperature, loss of appetite, mild headache, a feeling of fatigue, coated tongue, foul breath, and vague pain. Unfortunately there is a widely accepted idea among people that pain is a physiological accompaniment of growth. If the doctors and the public in general would accept the dictum that pain is an abnormality, they would not treat it so lightly and thus, by proper early attention, could prevent serious developments. When recognized early the proper treatment of symptoms will usually help the condition promptly. This includes the early removal of any, even the most minute, foci of infection. Too often the danger signals are not noticed and the child goes untreated until there develops an endocarditis with such involvement of the heart valves as results in a possible if not serious handicapping of the child for life or perhaps a pancarditis which terminates in an early death.

With the onset of the mild symptoms the alert physician will put the child absolutely at bed rest in order to take away as much of the burden on the heart, as possible, by slowing the heart rate; will examine critically teeth, gums, tonsils, adenoids, sinuses, middle ears and mastoids for concealed foci; will have blood counts made to determine any changes in the white count, do a sedimentation rate, and will carefully outline the area of deep cardiac dullness and the location of the apex beat. If the heart rate is unduly rapid, application of an ice pack over the heart will lower the rate and lessen the work of the heart. It is never wise to open up a focus during the acute infection as this sometimes floods the system with toxins and may aggravate the symptoms.

The term rheumatism embraces: 1. Polyarthritis which may vary from indefinable pains to red, swollen, painful joints which are usually only temporarily affected. Other painful affections are sometimes included such as torticollis, myositis, intercostal myalgia, lumbago, sciatica, and so forth, all of which, however, are

far more common in middle life. 2. A carditis which may be primarily an involvement of the myocardium, but soon extends to the endocardium and occasionally to the pericardium. 3. Chorea which is sometimes loosely termed rheumatism of the nervous system. 4. Accompanying these, many times, there are various skin rashes of which erythema marginatum is the most common. 5. Fibrous nodules which involve the fibrous tissues about the joints or the spine or the occipital fascia. Fibrous nodules occur very infrequently in Kentucky but their presence connotes a bad prognosis. Profuse very acid perspiration is most apt to be met with in the late adult attacks.

The treatment of the acute disease is practically reduced to the giving of some compound of salicylic acid. It is very important that a large amount of alkali should be given with it. The salicylates should be prescribed in dose sufficient to relieve the pain and reduce the temperature. As much as 400 grains a day have been given to children, but such large dosage is not recommended nor often required. The child should be kept rigidly at rest in bed as long as there is any fever or pain and until the white count and the sedimentation rate have become normal. The sedimentation rate gives very accurate evidence of the persistence of the infection and as long as it is increased there is great danger of heart involvement, which may be precipitated by getting out of bed too soon.

If the acute attack is combated and the patient is well there is always the danger of recurrence especially in young children. Statistically after puberty has developed the likelihood of such recurrence is greatly diminished. There have been some very favorable reports from the continuous administration of small doses of sulfanilamide or some other of the sulfa group in small doses for protection against recurring attacks. Such a procedure is definitely advisable when there has been an involvement of the heart, for even a very mild attack of endocarditis for which compensation has been adequate may be followed by a later attack of rheumatism when additional valves may be involved thus leading to a very grave prognosis.

Many English authorities state that the danger signal of the development of endocarditis will be an increase of the deep area of cardiac dullness and that this will precede an attack of acute endocarditis. It is certainly a satisfaction to be able to anticipate in this way, by a day or two, the development of a heart murmur even if you are not able to do much about it. The family can be warned that an organic heart lesion is developing so that a loud systolic murmur does not come unheralded.

With the onset of the acute endocarditis there is usually a very rapid heart beat which can be quieted down, and rest given to the heart by application of an ice pack. This should not be continued indefinitely, but the child usually gets so much comfort that it will ask to have it applied. The ice pack should be made as light as possible. Many times the child will have to be raised up in bed slightly to relieve the dyspnoea. It should lie in bed, but the load on the heart is lessened if the child lies prone. Very easily digestible food should be given these children and in not large quantities for any distention of the stomach adds to the discomfort of the heart. Proper elimination should be secured.

It has been the custom for many years to make a blanket rule that these children should lie flat in bed for six months to a year without any very definite criterion by which to judge when the child should be allowed to get up. Recently certain tests have been developed which are fairly simple and which give definite guidance to the doctor and to the family. The temperature is a safe guide. As long as there is any elevation of temperature there is an active process. When the temperature has been normal for two weeks an extra pillow can be put under the head. If the temperature still remains normal two pillows, and then a chair back, sitting up in bed, putting the feet out on the floor, and standing up, all of which will take somewhere near two months. The family itself can know by the reading of the thermometer what the definite indication is. The physician should also do a sedimentation rate and when it has leveled off he can feel that the focus of infection has subsided. Blood counts will show when a polyleukocytosis has returned to the normal, and watching the pulse rate gives a very reliable indication of the return of the myocardium to the normal, even in the absence of an electrocardiagram.

It is considered inadvisable to give digitalis in the acute stages of endocardi-

tis, where morphine or other sedative may be very helpful, but there is no objection at a later date and in the presence of decompensation to give digitalis as needed. On account of the ability of the child's heart to compensate, the presence of a murmur is not as alarming as would be the case in the adult. However, it must be emphasized that it is exceedingly important to prevent a second or third attack as an additional potential of heart injury.

Rest in bed, by slowing the heart beat, lightens the burden on the heart and thus favors repair of the damaged muscle and allows for the development of proper compensation. But it is possible to do damage by too prolonged rest. The heart being a muscular organ observes the physiological laws of nutrition and maintenance of strength of muscle fibers. After a sufficient period of rest has assured us of a complete subsidence of the infection it is advisable to begin graduated exercises to develop again the potential strength of the heart muscle fibers. Swedish movements and resistant exercises by increasing the work of the heart call into play the physiological methods by which the nutrition of the individual muscle fibers is accomplished. Going up and down a few steps at a time or swinging dumb bells or Indian clubs and doing well guarded exercises improves the tone of the heart muscle. At first these should be undertaken under careful observation and guidance of the physician, where possible, or under a thoroughly trained physical therapist. It must be recognized that such exercises will suffice to build up the strength of the heart for the ordinary demands of life. Unfortunately, we can never secure in this way that reserve of the heart capacity with which the normal heart is endowed, so that it will never be safe for any one so afflicted to do violent exercise or to make sudden adjustments such as are necessary in traveling over a high mountain or particularly going on a high airplane trip.

The socio-economic and psychiatric readjustment of these children is, at present, a particular concern of the Children's Bureau in Washington, D. C. The distressing need is for an economic and psychiatric rehabilitation of these children and the Bureau is attempting to make us aware of the complexity of the problems which this rehabilitation presents. Children who have bad heart disease ought not to live in apartment houses where they have to climb many steps. They should not be required to attend school where they have to climb to the second floor for class work. They should not be expected to go to school in very inclement weather or even when suffering from a slight infection which may light up an old infection and cause another attack on the integrity of the heart. Special beds in hospitals should be provided for these children where they can be under the expert observation of both pediatricians and cardiologists for the necessary length of time required for complete recovery, which would prove a very heavy economic burden to most families. The children should be checked and rechecked at regular intervals by specialists and nursed routinely by nurses who have been trained in handling such cases. Statistics show that a large proportion of children who have suffered a heart attack in early childhood will die before the age of 35 is attained and that comparatively few of them will reach the 45 to 50 age group. The burden of the support of these children and young adults becomes quite heavy to a family of small economic resources. Unless careful adjustments are made they become a heavy burden for support upon the state itself. While this problem is not so acute here in Kentucky, where the incidence of heart disease of children of school age will approximate one half of one per cent, it becomes quite a public health problem in some states where the incidence may amount to as much as 1½ to 2 percent of the population.

We are being educated also to a better understanding of the psychiatric response of these children to their environment. We have failed to appreciate and neglected to study the response of all handicapped children to the demands of our complicated social problems. We are beginning to sense somewhat the attitute of the child who cannot compete with other children in their schools, who can not even play as other children do and who are in their social life shut off from the usual joys and recreations of childhood. There must be some provision made for the special training of those who would integrate these children properly, and who would protect them from maladjustments in their lives. Such training and such attention will be highly expensive, and out of the reach of all but the few wealthy

families, in which rheumatism is not so apt to occur.

The importance of these problems is being emphasized also by a number of the more forward looking insurance companies, various heart associations, and some of the charitable foundations which are concerning themselves very deeply to find ways and means to meet this situation in the future. It is of the utmost importance that there shall be widespread research work to determine the cause and also to outline plans by which serious consequences may, as far as possible, be prevented.

The close relationship between chorea and rheumatism is being more and more recognized by practitioners as well as statisticians. In most cases probably there will have been a history of the milder rheumatic symptoms preceding by months or years the onset of the chorea. At other times the chorea will be the first distinct indication of a rheumatic involvement. Unquestionably there is a substratum of nervous irritability underlying the onset of chorea. It attacks females far more frequently than males, comes on usually in school children during the spring months following a hard school year. These attacks are often precipitated by an acute nervous upset. The severer type known as chorea insaniens occurs practically only in older girls and women and may cause death in young pregnant mothers. Pathologically there appears to be some evidence of a mild encephalitis, with red cell infiltration and minute petechial hemorrhages. The direct relationship between acute chorea and rheumatism will only be definitely proven when the cause of rheumatism has been settled. The heart should be watched very carefully in the choreic child for heart involvement is very frequent, and such involvement is often serious and sometimes fatal. It is true that chorea rarely responds noticeably to anti-rheumatic treatment though such treatment should be employed to prevent injury to other organs from the poison of rheumatism but enforced rest does shorten the period of illness. Shock therapy by injections of typhoid vaccine are often beneficial, but such cases should be under close observation in a hospital. A keen observer of such cases will often notice personality or other psychiatric disturbances in these children which may persist even after the apparent relief of the disease and sometimes result in real problem cases. The insaniens form is particularly distressing and, as noted above may cause death in the young pregnant mother. For such cases the active barbiturates or some of the sulfonal group must sometimes be pushed to the limit of tolerance for complete control.

In those cases in which uncontrolled, purposeless movements persist reeducation of muscle control and the removal of any local nerve irritant will frequently result in a cure. The treatment of the various skin rashes is symptomatic, but it is wise to administer the salicylates in order to combat the underlying basis.

PHILIP F. BARBOUR

DR. BARBOUR HONORED

The Senior medical students of the University of Louisville have presented it with an oil painting of Doctor Philip F. Barbour. This honors Doctor Barbour's many years of service as head of the Department of Pediatrics.

He was Professor of Pediatrics from 1898 to 1940 and still gives two hours a week to the clinics at the Children's Free Hospital. Doctor Barbour is a past President of the State Medical Association and is now the Pediatric Consultant of the State Department of Health and is engaged in doing graduate work with his former students all over Kentucky.

DR. C. C. TURNER

Dr. Caswell C. Turner, the President-Elect of the Kentucky State Medical Association, died suddenly on the morning of February 28th at Glasgow.

Dr. Turner was selected as President-Elect at the last Session in Louisville and would have taken office in October of this year. He has also served as President and Secretary of the Barren County Medical Society and for two terms as the Councilor of the Third District.

Dr. Turner graduated from the Louisville Medical College and was commissioned a Captain in the Army Medical Corps in World War I and served throughout the war at Base Hospital No. 69, of which Dr. Abell was Commander.

Dr. Turner was in charge of Internal Medicine at the Sampson Community Hospital in Glasgow, was a member of the Board of Glasgow Library Association, was a Mason and a member of the First Christian Church at Glasgow.

Dr. Turner was a great physician, a true and loyal friend, a Christian gentleman and his passing leaves a void that will be filled with great difficulty.

To his devoted wife and family the profession extends its profound sympathy.

ORIGINAL ARTICLES

PRIMARY CARCINOMA OF FALLOPIAN TUBES AND OVARIES

D. Y. Keith, M. D.
Louisville

Primary carcinoma of the Fallopian tubes and ovaries are discussed together as the management is the same. For them to be managed properly it changes the usual surgical management. Most surgical authors advise radical surgery including complete hysterectomy. To be able to give the patient the best we have to offer radiologically, complete removal of the tubes and ovaries and all pathological tissue is recommended except the uterus is left in situ as a receptacle for radium. Transplants to peritoneum are usually more abundant than are transplants to the uterus. This is to be followed with x-ray to the pelvis. The technic of radium and x-ray therapy are the same in both diseases. The discussion will be opened by presentation of a few case histories and followed by comments on the technic and the results of radium therapy.

Case I. 1. Bilateral papillary adeno-carcinoma of ovaries.

2. Primary adeno-carcinoma of right Fallopian tube.

3. Adeno-carcinoma right breast.

Mrs. J. age 49. First seen in 1936 for post-operative radiation treatment for adeno-carcinoma of the right breast. She is free of recurrence or metastasis from carcinoma of the breast at present.

Patient was seen in operating room with Dr. E. L. Henderson after the right tube and ovary had been removed. The left ovary was involved in a papillary cystic tumor 5 x 8 cm. in size and was also removed. The right ovary was less than half the size of the left. The right tube was involved in the ovarian mass, the diagnosis of "primary carcinoma of the right Fallopian tube" was made microscopically by Dr. J. D. Allen. Most of the primary carcinomas of the tube are in the lateral half and begin in the mucosa of the tube.

Ten days after operation x-ray therapy to the pelvis was begun, using one anterior and one posterior field 20 x 20 cm. in size. 2,025 r units were given to each field, a total of 4,050 r units. The daily dose was 202.5 r at a distance of 70 cm. using voltage of 400,000 and a Thoraeus filter equivalent to 6.5 mm of copper. The treatment required more than a month (35 days) to give as the patient had considerable nausea. On the sixteenth post-operative day a dilatation and curettage was done revealing a small amount of atrophic endometrium. 1,800 mg. hours radium were given in the uterus, using filtration of 0.5 mm of Cu and 2.0 mm of Pt.

Twenty-three months have elapsed since radiation was given to the pelvis and seven years and one month since the breast was irradiated. She is free of symptoms at present (Mar. 1st, 1943) of disease of the breast. Few adeno-carcinomas of the breast have five-year survival. Most of the recurrences or metastasis from carcinomas of the ovary will appear within the first year. Most of the deaths occur in eighteen months. We feel we can record her as being free of symptoms at present of either of her three malignancies.

Case II. Mrs. L., age 52. First seen June 1933. Hysterectomy 14 years ago for uterine fibroid by Dr. Irvin Abell. Present symptoms were gradual increase in the size of the abdomen for three years and a loss of weight and a loss of vital capacity.

At operation by Dr. H. H. Hagan, the ovaries could not be identified; evidently both were involved in a central mass that was fixed posteriorly. Two large sections of cysts were removed and as much of the posterior wall as possible as the posterior cysts walls were densely adherent to the sigmoid which was injured though not perforated. The injury was repaired with an omental patch. A moderate amount of fluid was present in the abdomen.

X-ray therapy was begun two weeks after operation, using one large anterior and one large posterior field, 20 x 20 cm. in size; also one large anterior epigastric field was used. As the uterus had been removed, 50 mgs. radium element was applied in each vaginal fornix for a period of 18 hours, a total of 1,800 mg. hours.

Our first bimanual pelvic examination was done six weeks after operation. A stony hard mass the size of a large lemon was present in the midline just above the tubes. Impression: Recurrent post operative carcinoma of ovaries.

It was six months after operation and five months and three months respectively after x-ray and radium applications before the patient began to improve. Seven months after operation the patient had

Read before the Jefferson County Medical Society, November 2, 1942.

gained twenty pounds in weight and pelvic examination was negative for palpable masses. There remained considerable thickening of the left broad ligament structures and vaginal adhesions were present.

One year later she was free of symptoms, had gained more weight and the pelvic examination was negative except for induration from scarring in the left broad ligament. Last record was October 13, 1942. She remains well and free of symptoms or disease.

Case III: C. B. S., age 27; had been in good health up to the present illness.

A tumor mass in the lower pelvis had been present for two years. She had been told it was a leiomyofibroma. During May and June 1930, there was rapid growth.

In July 1930 was operated by Dr. Wm. Ramsey. While delivering the left ovarian mass through the operative wound some fluid spilled into the pelvis. The tumor weighed six pounds. Post-operative course was uneventful and she was free of symptoms five weeks later.

Microscopical diagnosis was "papillary cyst adenoma, left ovary."

Examination: (August 29, 1930.) The patient is well nourished and well developed. Pelvic examination fails to reveal evidence of recurrence. The uterus was small and retroflexed. The patient had menstruated one time since operation. She was advised what symptoms to expect if a recurrence developed. No radiation was given or advised.

November 19, 1930: Pelvic and abdominal examinations were negative for recurrence. She feels and looks well and has gained some weigth. Should anything unnatural occur she is to return at once; otherwise in six months.

Comment: Due to the patient's age and complete encapsulation and removal of the tumor she was not irradiated. Close observation was obtained as she was very co-operative.

October 13, 1942: Patient is in good health. She has remarried, and has one child seven years of age.

Case IV: Mrs. R. D., age 38. No history of neoplasms in family. Catamenia age 16, preceded by three days cramps. Maximum weight 122 lbs; present weight 112.

Married nine months ago. Two months after marriage an increase in the size of the abdomen was noted; pregnancy was expected by the patient and the family doctor. An increase in size of the abdomen has been rapid for the past two months. Shortness of breath for the past month. She came to my office for x-ray examination of abdomen to determine size of fetus.

Examination: (October 13, 1921) Abdomen size of full term pregnancy filled with fluid. No masses or uterus were palpable.

Operation: Large amount of fluid in abdomen was removed by Dr. E. S. Allen, and multiple papillary cysts of ovaries were removed. Transplants were present on uterus, urinary bladder and terminal ileum. Weight on leaving the hospital was 87 lbs. The removal of five gallons of fluid accounts for great loss in weight.

Treatment: Radium: October 13, 1921 to October 29, 1921, 3900 milligram hours of radium element given via four portals: Uterus 1200 mghrs., Cervix 900 mghrs., vaginal fornices 900 mghrs., each. X-ray: November 14, 1921 to January 16, 1922 five treatments: 130 KV; 6 mm aluminum-glass filtration. Five doses at distances of 12 and 10 inches respectively were given. Portals: anterior and posterior pelvis.

November 14, 1921, 14 min. 1st dose-ant. pelvis 130 KV; filters 6 alg. 12" dist.

December 5, 1921, 10 min. each, 2nd dose ant. and post. pelvis. 130 KV; 6 alg; 12" dist.

December 7, 1921, 10 min. each, 3rd dose-ant. and post. pelvis. 130KV; 6 alg; 12" dist.

January 11, 1922, 30 min. 4th dose-ant. pelvis. 130 KV; ½cu. 1 alg. 10" dist.

January 16, 1922, 20 min. 5th dose-post. pelvis. 130KV; ½cu. 1 alg. 10" dist.

Four and a half months later the patient had gained twenty-five pounds in weight.

Health remained good until April 1932 when she reported with a toxic thyroid and was given one series of x-ray therapy to the thyroid consisting of five treatments. She had five abscessed teeth which were removed. Basal metabolism rate plus 11.3. At the end of two months all symptoms referable to the thyroid had disappeared.

When patient was last seen October 21, 1942, twenty-one years after treatment, she enjoyed excellent health. Weight 151 pounds.

Abdominal and pelvic examinations reveal no permanent changes in the skin of the anterior or posterior pelvis.

Bi-manual Pelvic Examination: The uterus cannot be identified. Vaginal inspection reveals almost complete absence

of the cervix. There is definite scarring in the upper vagina with several fine red telangiectatic vessels present, one of which ruptured and bled scantily from vaginal dilatation with the speculum. Patient is free of symptoms, is well, happy and very grateful.

Case V. F. H. E., age 26, married, no pregnancies. Personal and family history not of interest. Patient is well developed and fairly well nourished. Vaginal examination not done.

On September 3, 1924, operation by Dr. Irvin Abell, showed the pelvis to be filled with a papillary mass involving the tubes, ovaries, appendix, and uterine fundus, and small pieces of tissue floating free in two gallons of fluid. No nodules found above the pelvic brim and mass was confined to the true pelvis. The mass was removed and a bilateral salpingo-oophorectomy and appendectomy were done, the tip of the appendix was adherent in mass. The post-operative course was uneventful.

Microscopical Diagnosis: Papillary mucoid cyst-adenoma of ovary.

From November 5, 1924 to November 13, 1924, six x-ray treatments of 2000 r estimated, each were given 200 KV, 4 M.A., 1 mm copper and 1 mm aluminum filter, 18 inch distance, total 1200 m.a.m., 480 m.a.m. anteriorly and 240 m.a.m. posteriorly.

On November 10, 1924, 100 milligrams of radium in a two chamber, 2 mm brass applicator were inserted into the uterus (50 mgs. in uterus and 50 mgs. in cervix) for eighteen hours. Total 1800 milligram hours.

The patient showed an immediate favorable response, having gained twelve pounds by January 19, 1925. She felt and looked better. Bimanual and abdominal examination negative for fluid or mass. X-ray therapy January 19, 1925 to January 24, 1925. Five treatments using previous factors for a total of 392 m.a.m. 160 m.a.m. anteriorly, and 232 m.a.m. posteriorly.

June 15, 1925. Patient free of symptoms, gained more weight, looked well. Abdominal and bimanual examination negative. Will report in six months.

January 5, 1926. Free of symptoms and apparently in excellent health. Bimanual examination reveals slight thickening of the left broad ligament, right negative. No tenderness.

November 27, 1926. Bimanual examination shows no evidence of recurrence.

October 15, 1942. Letter from patient, "I am free of ovarian disease and have not had any intercurrent disease since treated in 1924." An 18 year survival.

Case VI. A. L., single, 42 years of age. No serious illnesses. Family history negative. Menses normal and regular until June 1936, when they became irregular, having shorter intervals and an increased flow. She had several attacks of pelvic pain and noticed inguinal adenopathy. Flooding occurred at menstrual periods from February to April 1937. She had lost fifteen pounds in weight. She is a thin emaciated brunette.

On April 28, 1937, operation revealed large, bilateral ovarian papillary adenocarcinoma. The left was adherent to the sigmoid, the right to the small bowel. Both ovarian tumors and a large amount of fluid were removed by Dr. F. P. Strickler.

Irradiation: May 5 to 17, 1937, 945 r each, to anterior and posterior pelvis. Total 1890 r, given at a rate of 135 r per day. Factors were 400 KV; 5 M. A., 70 cm. distance and Thoraeus filter equivalent to 6.5 mm copper. May 22, 1937, 2000 milligram hours of radium element was given in the uterus, using a two chamber uterine applicator, walls of applicator being 1 mm. al., 2mm. brass. She had no nausea during treatments. Two months later when the patient reported, she had a good appetite and slight weight gain. A second series of x-ray treatments were given July 22, 1937 through August 6, 1937, using the same factors and daily dosage as before for a total of 1890 r, 945 r anterior, and 945 r units of x-ray to the posterior pelvis.

On May 4, 1938 and again on October 11, 1939 bimanual and abdominal examinations were essentially negative. No masses or fluid could be found.

On May 11, 1940 examination still negative. Patient looks and feels well and is going to California where she is now.

October 23, 1942: Letter from patient still living in California, states she has gained eight pounds in the past two years, feels very well and is exceedingly grateful.

Case VII. A. T., single, 43 years of age. April 1940.

Before operation elsewhere in September 1939, her abdomen was filled with fluid. Both ovaries were removed. Microscopical: "peritoneal implant of pseudomucinous cyst-adenoma of the ovary." Within three months she noticed a recurrent mass in the left lower pelvis and six

months after operation her abdomen was filled with fluid.

EXAMINATION: The patient is well nourished and developed. A mass seven inches long is in the left side of the abdomen which is distended with fluid. It is fixed posteriorly. A similar, but smaller, mass is on the right. The vagina is too small to admit the examining finger.

PLANS: Operative removal of masses and fluid, intrauterine radium followed by x-ray therapy.

On April 24, 1940 two large pseudomucinous cysts were removed by Dr. H. H. Hagan. Extensive omental transplants were present and were removed. The uterus was slightly enlarged and irregular in contour. Twenty-three hundred milligram hours of radium element was given in the uterus, using 1 mm Al. 2mm Pt. filter. The upper two chambers contained fifty milligrams of radium each; the lower chamber was empty.

From April 21, 1940 through May 15, 1940, 2025 r units of x-ray were given to the pelvis in twenty treatments, total 4050 r, 202.5 r per day, 400 KV; 5 M. A. through Thoraeus filter equivalent to 6.5 mm Cu. at 70 cms distance. Patient had slight nausea, gained strength and walked to the department for the last six treatments.

In three months she gained in strength, had a good color, she had no distress but her appetite was poor. Complete epilation of skin anteriorly and posteriorly, the latter had not completely recovered. No masses were palpable but a small amount of fluid was present.

From July 13, 1940 through July 27, 1940, 3240 r units of x-ray were given; 1215 r posteriorly and 2025 r anteriorly.

August 8, 1941. She began the duties as maid a few weeks after the last treatments. She felt well, but a few weeks ago noted thickening of the skin in the left lower quadrant which had increased, and she had low back pain. Examination reveals mild telangiectasia near abdominal scar and scant pubic hair. There were no other irradiation changes. There was definite thickening of the wall of the abdomen in the anterior left lower quadrant. No masses were present, but a brawny ridge was felt in the left pelvis. Plans: X-ray to left pelvis and abdomen.

From August 10, 1941 through August 19, 1941, 1215 r were given to anterior left abdomen and 810 r to posterior left lumbar area; total 2025 r. The same factors used as formerly. Moderate nausea resulted and persisted.

October 10, 1941. Relief for four weeks then had constant moderate low back pain. Still had brawny induration in left lower quadrant and thickened anterior abdominal wall on the left. No recurrences felt on pelvic examination. Under novocain anesthesia, Dr. H. H. Hagan incised the abdominal wall and took a section of skin and fat. No tumor could be found. He was so sure the induration was benign that microscopical slides were not made. Using a low posterior 20 x 20 cm port, 2025 r was given in ten days. Only one treatment anterior of 202.5 r given. Definite relief of pain was experienced at the end of x-ray therapy.

June 14, 1942. No pain since October 1941, but recently had some left lower quadrant distress. Examination: Patient looks well. Left anterior abdominal wall induration is present due to radiation fibrosis, also depigmentation and telangiectasia over left lower anterior abdomen, lower lumbar and sacral regions, but to much lesser extent posteriorly.

October 16, 1942. Letter from patient's employer states "Alma remains well. There is still some soreness and occasional pains near incisions. She looks well and eats well, seems stronger all the time."

Summary of irradiation treatments:

April 24, 1940. 2300 mghrs. radium, 1 mm Al. 2 mm Pt. Filter. Intrauterine.

X-ray Record:	Ant.	Post.
4-21-40 to 5-15-40 400 KV 5 M. A., Thoraeus filter	2025 r	2025 r
7-13-40 to 7-28-40 400 KV 5 M. A. Thoraeus filter	2025 r	1215 r
8-10-41 to 8-19-41 400 KV 5 M. A., Thoraeus filter Left	1215 r	810 r
10-10-41 to 10-20-41 400 KV 5 M. A., Thoraeus filter	2025 r	1620 r

Totals: Anterior pelvis 5467.5 r, posterior pelvis 5670.0 r. Grand total to pelvis 1,1137.5 r units.

MANAGEMENT: The surgical management is to remove all of the tumor tissue possible, being sure to remove both ovaries and both tubes, even if one appears normal it should be removed if patient is forty years old or above. Always leave the uterus for radium application to more satisfactorily radiate the pelvis. This also is true of the recurrent cases.

As soon as the patient has recovered from the surgical operation (ten to fifteen days) x-ray radiation is to be started. Our technique has been to give 2000 to 4000 mghrs. of radium element in the cervico-uterine canal and vaginal fornices depending on the size of the uterus and the size of the patient. A large patient with a typical female pelvis and thick abdominal walls requires more radiation than a small or average sized patient.

At present, x-ray radiation is given by one large anterior and one large posterior field 20 x 20 cm. square, in the small or average sized pelvis, where the pathology is reported by the surgeon to be limited to the pelvis. Where metastasis has spread to the upper peritoneal cavity, one upper and one lower anterior portal and a similar posterior field of the same size are used. Where the patient is large, more even radiation can be attained by using right and left anterior ovarian fields, one upper and one lower large central posterior fields. A right and left lateral field of similar size may be substituted for the upper anterior abdominal field. This technique prevents crossfiring of the x-ray beams. We prefer, and do see most of our cases while the abdomen is open.

The total dose of x-ray depends on the size and the thickness of the patient. A patient with a pelvis measuring 10 cm. will receive 1200 r units to anterior and posterior fields, while the patient measuring 20 cm. will receive 2000 r units or more to each field. The very large patient receives similar additional doses through a right and left lateral portal and will receive the same dose to two anterior ovarian fields. The x-ray therapy is repeated in eight to ten weeks.

Our earliest cases were treated with 130 KV with 6 mm aluminum or 0.5 Cu. 1 al. filters, anode skin distance of 25 to 30 cm. The later ones (from 1925 to 1935) were given a voltage of 200 KV and 1 to 2 mms of copper were used as a filter, depending on the thickness of the pelvic and abdominal walls. Anode skin distance was 50 cm.

Since 1935, we have used a voltage of 400,000 and a Thoraeus filter equivalent to 6.5 mm of copper at a distance of 70 cm., given at a rate of 13.5 per minute, measured in air. The daily dose is 135 r to 202.5 r. The advantage of higher filtration and higher voltage is that there is little or no permanent damage to the skin and a more even depth dose is obtained at a 10 cm. level. The nausea is less, is frequently absent and the annoying bladder, vaginal and intestinal symptoms (radio endothelitis) is much less and frequently negligible where the daily dose is small.

SUMMARY

The symptoms and diagnosis of ovarian carcinoma are briefly discussed. Primary carcinoma of the Fallopian tubes is usually diagnosed microscopically. The surgical and radiological management as given, if adherred to and persisted in in every case of ovarian carcinoma, a larger percentage will be salvaged than if surgery or x-ray alone is used, or poorly given radiation is half-heartedly administered. Good surgery and good radiation are essential to success.

These case histories are presented to illustrate the proper surgical and radiological management and results.

DISCUSSION

Oscar Bloch, Jr.: Dr. Keith, I wonder whether you would say something about how to treat irradiation sickness. I seem to have encountered various statements in the literature about using the vitamin B complex, about vitamin C and vitamin A, in trying to alleviate intestinal distress from irradiation. Is there any conclusion about the best methods? Is any one method effective in a considerable percentage of cases?

Irvin Abell: As I listened to Dr. Keith's report I tried to identify a patient of mine whom I referred to him some years ago; I had removed an ovarian tumor which proved to be adenocarcinoma; two years later this patient returned with abdominal recurrence and ascites. I referred her to Dr. Keith for irradiation. I saw her some four or five years later, at which time she was apparently entirely well.

This experience convinced me that irradiation therapy was worth while, even when surgery revealed what we have heretofore regarded as an irremediable condition. I do not know enough about the physics of irradiation to discuss the technique of its application. Dr. Keith's suggestion in operating upon ovarian malignancy that the uterus be left in situ, is contrary to surgical teaching and surgical practice, which heretofore have postulated a complete cleansing of the pelvis when ovarian

malignancy is encountered.

In those cases in which there is evidence of extension by continuity or of mestastasis, one can see the logic of Dr. Keith's contention, since by inserting radium into the uterine cavity a better application of the curative rays is obtained. We have seen patients from whom we were unable to remove all of the visible disease, and who were given irradiation therapy subsequent to operation, who are now living and apparently well five and six years after treatment.

I appreciate Dr. Keith's paper and feel that I have gotten much out of it that offers encouragement, in addition to his suggestion regarding retention of the uterus in cases in which there are visible metastases so that the pelvis can be more efficiently irradiated by the application of radium within the uterine body.

D. Y. Keith, (in closing): Answering Dr. Bloch's question, everything has been tried. Nicotinic acid gives us more relief than any other thing we have tried to control nausea for twenty-four hours. Glucose, intravenously, gives temporary relief from nausea. Even some patients, with skin carcinoma over a small area have had nausea, irradiation nausea. We had one man with carcinoma of the external ear who suffered extreme irradiation nausea although the area was small, being only 3 cm in diameter. He would be sick for two days after every irradiation. Nothing did any good as far as I could determine.

In another case of carcinoma of the skin of the back, 6 cm. diameter, nicotinic acid gave relief within twenty-four hours' time. She did not have much nausea after nicotinic acid was given.

We do not have much nausea because we only give small daily doses of x-ray. The usual dose of nicotinic acid is 50 mgs. three times per day before meals. The early cases had large daily doses given at a short anode distance. Remember at a 10 cm. distance there is four times as much x-ray as at 20 cm. distance. Some now only receive 135 r per day. If you stick to small x-ray dosage, you have very little irradiation nausea. We rarely give more than 200 r per day now. Occasionally, with an out of town patient, we double up, give 300 r for two days a week, then use only 200 r per day for the daily dose and they will have little or no irradiation nausea.

Years ago we used, and we thought we had less nausea by using dilute hydrochloric acid t. i. d. In my experience, nicotinic acid has been more valuable. The best report I have seen was from a doctor in Toronto, published in the J.A.M.A. three years ago. He had good results, even in Hodgkin's disease, the most susceptible disease to irradiation nausea.

THE PATHOLOGY OF CORONARY DISEASE

E. S. Maxwell, M. D.
Lexington

Pathological changes in the coronary arteries are responsible for most sudden deaths due to organic disease and are the cause of the frequent and terrifying symptom complex, angina pectoris. At autopsy the pathologist frequently is not able to demonstrate adequate anatomical lesions in the hearts of those dying of typical angina pectoris or who have had anginal symptoms. However, careful examination and complete dissection usually reveal the cause. The anatomical distribution of the coronary arteries is fairly constant. The left coronary artery arises from the left aortic sinus and the main trunk immediately divides into two large branches. The anterior descending branch swings around to the left of the root of the pulmonary artery and descends in the anterior interventricular groove to the apex where it sends branches to the diaphragmatic surface of the heart to anastomose with terminal filiments of the right coronary artery. The myocardium of the left ventricle is supplied almost wholly by this artery as is the anterior portion of the ventricular septum. The circumflex branch of the left coronary artery passes to the left in the auricular groove to the posterior surface of the heart where it sends branches downward and forward to supply the posterior wall of the left ventricle and anastomoses with branches from the right coronary and the descending branch of the left. The right coronary artery arises from the right aortic sinus and extends to the right in the auriculoventricular groove, then backward and downward to the lower surface of the heart where it gives off branches that supply most of the right ventricular wall. These three main coronary arteries have an extensive and widespread anastomosis of their finer branches in the auricles, ventricles and septum. This anastomosis is of such volume that the complete stoppage of one of the larger radicles is not sufficient, in most instances, to produce an infarct. When extensive damage is found in the mycocardium, usually all the vessels are below par in their ability to transmit blood. The descending branch of the left coronary artery is practically always the most extensively involved. In a

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series of cases reported by Katz, et al, this artery was diseased in every instance. This artery is not diffusely involved but a small segment about ten millimeters in length and about fifteen millimeters from the origin of the circumflex branch is the site of the most extensive atherosis. The right coronary artery is the next most frequently involved in pathological processes. Most of the lesions are in the larger trunks in the subpericardial tissue. The lesions occur in small segments of the vessels and are frequently eccentric. The small muscular branches show surprisingly little disease.

The pathological lesions found in these arteries are: (1) fibrosis; (2) hyalinization; (3) atherosclerosis; (4) calcification; (5) embolism. Some investigators (Leary) believe that the inciting factor is a lipoid dyscrasia. According to this hypothesis, the earliest vascular lesion is the presence of large cells containing fine lipoid granules immediately beneath the endothelium of the arteries. These lipoid cells, believed to originate in the reticuloendothelial system of the liver and adrenals, selectively invade the walls of the coronary arteries and to a much greater extent, the wall of the aorta. The deposition of the lipoid cells is progressive. The old cells are replaced by new or the old cells migrate to the deeper layers of the intima or even into the superficial layer of the media, while the new accumulate near the endothelial lining of the arteries. In youth these lipoid cells are replaced by fibroblasts, the amount of fibroblastic proliferation depending on the number of lipoid cells that accumulate in the arterial intima. This produces thickening of the intima with a corresponding decrease in the size of the lumen.

The cellular deposit is usually eccentric, not involving the entire circumference of the vessel. The fibroblasts progressively replace the lipoid cells. This newly formed tissue is avascular in that it is not supplied with capillaries and depends on imbibition for nutrition. As the accumulation of connective tissue increases, the nutrition is impaired, usually in the part most distant from the lumen. This results in necrosis, usually with the deposit of a small amount of free fat. Usually there is no great interference with function until damage to the endothelial lining occurs. As a result of degeneration the intima becomes rough, fibrin and platelets are deposited forming a mural thrombus, which effectively closes the lumen and may cause death.

In older individuals the presence of lipoid containing cells does not stimulate fibrosis. On the other hand the cells accumulate in more or less large aggregates and when the nutrition is inadequate necrosis results. As these large accumulations of lipoid cells disintegrate, the lipoid material is freed; some of it undergoes chemical changes and forms cholesterol. The cholesterol forms large insoluble crystals. These lesions are called atheromatous cysts or abscesses and are filled with cholesterin crystals, esters, disintegrated cells and fluid. These atheromatous abscesses, as a result of necrosis of the wall nearer the lumen of the vessel, rupture into the lumen and discharge their content into the blood stream. In the aorta, especially the abdominal aorta, these lesions may be most extensive. Here the content of the atheromatous cysts is discharged into a large vessel where it becomes greatly diluted and rarely produces symptoms. In the small coronary arteries the particulate material is deposited as emboli in the smaller arterioles and may cause sudden death. Another lesion that may result from the deposit of these emboli is multiple small areas of fibrosis in the myocardium. A more frequent and more dangerous lesion that may follow the rupture of an atheromatous abscess is the formation of a thrombus with complete occlusion of the artery at the site of the rupture.

Calcification in the wall of an artery is an old lesion. Calcium is deposited in dead or in poorly nourished tissue and has little significance clinically. It does make the arterial walls rigid and inelastic but does not materially interfere with blood flow. Embolism of the coronary arteries, other than the emboli originating from atheromatous abscesses in the coronary arteries, is very rare and deserves little consideration. The emboli usually originate from ulcerative endocarditis involving the mitral or aortic cusps or from a degenerating left ventricular mural thrombus.

Interference with the blood supply to the myocardium may produce instant death following which there will be no demonstrable lesions in the muscular tissue. If death does not occur immediately, an infarct may be produced in the area supplied by the occluded artery. If the blood supply is completely occluded and the collateral circulation inadequate, complete necrosis of the area results. As this

necrotic tissue undergoes liquification the wall weakens, and aneurysmal dilatation, or even rupture, of the heart may follow. If the blood supply is only partially cut off, the more sensitive muscle cells will undergo necrosis and liquifaction, while the more hardy connective tissue may survive, producing a large scar. If the endocardium is involved, as it frequently is, a large mural thrombus may form. These ventricular mural thrombi are an added hazard, since they may become dislodged or undergo fragmentation with the liberation of multiple emboli into the blood stream. These emboli may, in turn, if in the left ventricle, produce infarcts in the brain, kidneys or spleen. Other organs are less often involved. If the mural thrombus is in the right ventricle, lung infarcts are the result.

Those who die of angina pectoris or those who have had anginal symptoms and no lesions are found in the arteries, probably die as a result of spasm of the muscular coronary arteries. This is brought on by hyperactive nerve stimuli. More frequently we see hearts with considerable atherosis with moderate to extensive narrowing of the lumen in the coronary arteries, but in which no thrombosis or ruptured atheromatous lesion can be found to explain the sudden and unexpected exitus. These vessels are sufficient for a limited amount of work but with unusual exertion there is myocardial ischemia, anginal pain, and dyspnoea. These hearts may go into ventricular fibrillation and death.

Leary has been able to produce atheromatous lesions in the coronary arteries and aorta in rabbits by feeding them cholesterol. These experimental lesions, from the earliest to the atheromatous abscesses, are in every way similar to those in human arteries. He calls attention to the fact that man is the only animal that eats milk and eggs, which are usually rich in cholesterol, throughout life and is the only animal known that dies of atheromatous lesions at a relatively early age.

Summary

Youth reacts to the presence of lipoid cells in the arterial wall by the laying down of connective tissue which produces a narrowing of the vascular lumen.

In older individuals the atheromatous abscess is the characteristic lesion.

Death may be produced by the formation of a thrombus in the lumen of the coronary arteries, by the rupture of an atheromatous "abscess," by spasm of the muscular arteries, or by ventricular fibrillation induced by overexertion in a heart with damaged coronary arteries.

DISCUSSION

Harry M. Weeter, Louisville: It is hard to discuss a paper as well presented as this, particularly by a speaker who is so enthusiastic that he doesn't hear the gavel, and also a paper that hangs a cloud over one's favorite meal, namely, bacon and eggs for breakfast. This is the last time I think I shall enjoy cholesterin in my eggs.

Several things strike me in discussing a paper on coronary sclerosis and coronary occlusion. One is, it is not a disease of middle age and of old people; it simply manifests itself clinically to a large extent in those age groups. Coronary sclerosis begins in young individuals, and the time to attack it is in the young individual in whom the disease is starting and in whom it will progress to the point where clinical symptoms become evident. In post-mortems on young men and young women in the late twenties and in the early thirties, we find small yellow plaques, insignificant in size, maybe only a few of them, in the aorta and especially in the coronary vessels and more particularly in the proximal part of the coronary arteries. These sclerotic lesions are there in early life and they progress with age. That means that whatever is to be done to eliminate coronary sclerosis has to be started with the young person, not with us old cripples who can't get in military service.

Two ideas occur as to the mode of study of this subject. One is to consider arterio and coronary sclerosis in the various age groups in a wide area, paying special attention to the occurrence in different races. If cholesterol in the diet is a factor, then much might be gained by a study of the cardio-vascular system of those people who do not use foods such as milk and eggs throughout adult life.

A second source of information on the effect of diet is the cardio-vascular changes in animals, to study with the aid of veterinarians and scientifically minded people connected with our zoological gardens must be solicited.

A. T. McCormack, Louisville: I want to make a contribution to this discussion as one of those who has had the privilege of having a somewhat impaired heart, and I know that Dr. Weeter and Dr. Maxwell are correct in saying that this starts early, because mine started some nine years ago when I was a relatively young man and I had begun to have a little anxious feeling in that part of my anatomy. I consulted one of our distinguished cardiologists, who put me on a regimen and some capsules. I have been taking them nine

years, now, and he said I didn't have much the matter. The thing that he did that I want to commend to you other young men was to tell me to lie down for thirty minutes after every meal. I have done that, with about thirty exceptions, for nine years in a very busy life. When I am in Washington before a Senate or House Committee, I get my lunch and get back in there before they get back, and lie down on the table and rest for thirty minutes. They have other things on the table anyhow, and I get taken off with the other agenda when they are ready to reassemble. I have found that an extremely satisfactory thing. You young men try it. You will last longer and you will come to the pathologist with more definite pathology than you will if you die too young and they have to make estimates on the unknown.

I just want to make that contribution to you so that as many of you as possible may do that, because doctors are dying more from this trouble than any other group in the whole of the United States. That is because we are irregular in our habits, in our eating, and if you are irregular in your eating habits, just remember that you are chucking just one more hour or two off your lifetime. If you eat three times a day and don't eat between meals and don't take a lot of soft drinks between meals, you will be better men and die much later with whatever thing is in your heart.

LESIONS OF TENDONS AND TENDON SHEATHS

CHARLES WOOD, M. D.
Louisville

Tendons are inert structures, whose function is largely passive. Consequently pathology in tendons or their sheaths is often overlooked as a cause of pain or dysfunction unless one is looking for it. Since these conditions are disabling to a greater or less degree, and since most of them can be relieved by proper treatment, their diagnosis is important enough to warrant discussing them.

Lacerations of tendons, especially in the hand and fore-arm, frequently complicate small, apparently trivial cuts. They may be missed, unless one is careful to test for the integrity of tendons distal to the injury and to search the wound for evidences of penetration or extension beneath the surface. The treatment of course is anatomical surgical repair under strictest aseptic conditions.

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A tendon may be ruptured from acute trauma, overstretching the tendon, or from sudden violent muscular contraction when the insertion of the tendon is fixed. Tendons also may rupture from repeated minor trauma or friction. In most cases of rupture, some pre-existing pathology is found at the site of rupture in the form of fibrosis, fatty infiltration or calcareous degeneration. These degenerative changes may weaken a tendon so that rupture may follow a very minor strain—the so-called spontaneous rupture. The rupture may occur at the musculo-tendinous junction, through the substance of the tendon or at its insertion, in which case an avulsion fracture may be present. The outstanding symptom is acute pain while examination reveals tenderness and specific loss of function. Swelling and ecchymosis usually develop rapidly, but if they are not too great, a defect may be palpable between the fragments.

Of special importance are ruptures or tears of the fibro-tendinous cuff of the shoulder, composed of the subscapularis, supra-spinatus, and infra-spinatus tendons. These tendons, blended together and actually forming a major portion of the capsule, cover the head of the humerus anteriorly above and posteriorly. Transverse rupture of the supraspinatus tendon, or avulsion fracture of its insertion into the greater tuberosity, is the most frequent injury. It may be recognized by tenderness over the greater tuberosity and in the supraspinous fossa, and by inability to initiate abduction at the shoulder. Longitudinal splints or tears also occur, usually between two adjacent tendons of the cuff. Such tears typically produce painful slipping or catching on certain motions of the shoulder as a portion of the head rides between or catches on the torn edges.

Other tendons in the upper extremity subject to rupture include those of the long head and insertion of the biceps, the extensor pollices longus following a Colles' fracture, and the insertion of the extensor expansion into the distal phalanx of a digit. This last produces a "drop finger" or "base-ball finger" with loss of extension at the distal joint.

In the lower extremity, loss of the extensor mechanism of the knee results from rupture of the quadriceps or patellar tendon or from fracture of the patella. Rupture of the Achilles tendon also is a disabling condition, so far as the functon of

the foot is concerned. Rupture of the plantaris tendon causes acute pain in the calf, often disabling in severity and persisting for several weeks.

Contractures of tendons, with fibrosis and shortening of their attached muscles, cause severe deformities and disabilities. They develop following prolonged muscle spasm, and must be guarded against in the treatment of osteomyelitis or arthritis, and of course, in poliomyelitis.

The clinical entity recognized as fibrocitis is probably due to a localized contracture of the tendinous fibers of origin of a muscle from bone. Clinically, it is recognized by pain and tenderness over a bony prominence, often with radiating pain in the involved muscles. The pain is accentuated by active contractions or passive stretching of the muscles. The two most common sites of this lesion are the back and the elbow. In the former pain in the back, sometimes accompanied by sciatica, is associated with tenderness of the posterior superior iliac spine. There is marked increase in pain on flexion of the back, active hyperextension or lateral bending or on passive straight leg raising.

In the condition known as tennis elbow the pain may be diffuse, involving the muscles of the upper fore-arm, but the tenderness usually is localized and is most acute over the lateral epicondyle of the humerus, the site of origin of the common extensor tendon. Pain is aggravated by gripping or by rotating the fore-arm, for in these motions the extensors are forcibly set.

Fibrocitis in either of these localities may follow trauma, and pain and disability may be prolonged. It can sometimes be relieved by novocain injection, but if it recurs, subperiosteal stripping to allow relaxation of the involved structures usually is permanently curative.

A similar condition is seen in Ober's syndrome where there is thickening and shortening of the fascia over the tensor fascia lata muscle. This produces on abduction contractures of the hip, causing back-pain and sometimes sciatica. Dramatic relief can be obtained by section of the fascia.

Neoplasma are rare, and primary sarcoma of tendons or their sheaths practically never occur. Giant-cell Xanthomatous tumors are seen most frequently arising from the sheaths of the flexor tendons of the digits. They produce localized swelling and some degree of dysfunction. The ganglia or cysts seen in the region of the wrist or in the popliteal space are thought by some to be neoplastic, and they may arise from tendon sheaths. Many, however are outpocketings of the synovia through the joint-capsule, becoming secondarily attached to the adjacent tendon sheaths.

Osteochondroma is another neoplasm which may be seen arising from a tendon, usually near a joint. These tumors vary greatly in their size and presenting symptoms. Some may be regarded merely as supernumerary sesamoids, while others may grow to a fairly large size and cause pain or dysfunction. Occasionally they are seen in cases where tendon rupture has occurred, and other pathology, primarily degenerative, is present.

The final subject to be considered is tenosynovitis or tendovaginitis, omitting acute suppurative infections and fascial space involvement. Tuberculous tenosynovitis occurs less frequently than formerly, although it is still seen involving the flexor tendon sheaths of the wrist and fore-arm. It is characterized by its chronic course, moderate swelling, and on aspiration or exploration by the presence of pathognomonic rice bodies.

Non-specific, non-suppurative tenosynovitis characterized by localized pain and tenderness and definite soft crepitation on motion is known, because of this feature, as peritendinitis crepitous. It may follow acute trauma, occupational strain, or occasionally may be due to focal infection. The soft crepitation on motion is diagnostic, but one must be sure not to overlook some underlying lesion such as a fracture.

A third type of tendovaginitis, and one causing most interesting manifestations, is the stenosing variety. Pathologically, there is a localized thickening and hypertrophy of the sheath usually following trauma, producing a constriction of the lumen of the sheath and interfering with the normal gliding motion of the tendon. While the condition may occur anywhere, the two most common sites are over the radial styloid process on the side of the wrist and in the tendon sheaths of the palm at the metacarpo-phalangeal joints. In these locations, typical clinical entities result from this lesion.

Stenosing tendo-vaginitis at the radial styloid process, binding down the tendons of the shorter extensor and long abductor of the thumb is known as deQuervains'

disease. It is characterized by pain, tenderness, with a localized swelling in some cases. Weakness and the loss of grip because of pain are common symptoms, and there is demonstrable loss of extension and abduction of the thumb. In addition to these findings one test is pathognomonic, forced ulnar deviation of the hand with the thumb flexed and adducted causes excruciating pain at the radial styloid. If the thumb is not held adducted, so that the involved tendons are not stretched, the pain is not produced. This condition has been erroneously diagnosed as sprain of the wrist, arthritis, exostosis, or infection, and we must be careful to rule out such lesions, as well as other conditions such as bone cyst, or fracture.

Snapping thumb or trigger finger is produced by stenosing tendovaginitis of a flexor tendon sheath at the metacarpophalangeal joint in the palm. At this point, the deep flexor tendon passes through the superficial, and constriction of the lumen of the sheath causes painful interference with function of the tendons. Passive flexion and extension are free, but active motions are difficult and painful. At a definite point in flexion or extension, motion is momentarily stopped as the constriction binds the tendons, then as more force is exerted the constriction is passed and the finger snaps or seems to jump through the rest of the arc to complete flexion or extension. Because of this peculiar jerky motion, the terminal phalanx, especially if the thumb is involved, seems to dislocate on motion, but there is no actual joint pathology, and the phenomenon does not occur on passive motion.

Stenosing tendovaginitis, of course, is not a serious disease, although it can be incapacitating for certain occupations. It is easily relieved by simple excision of the thickened portions of the sheath, and the results of this procedure are quite gratifying to the patient.

In conclusion, I wish to stress again, the importance of considering these lesions as possible causes for many cases of pain and dysfunction. They are readily recognized, if present, and proper early treatment usually relieves or prevents painful disability.

DISCUSSION

Robert Woodward, Louisville: There is one condition that I would like to elaborate on that is encountered frequently by the general practitioner, that is so-called tennis elbow. As Dr. Wood told you, it is characterized by pain on the outer side of the elbow just below the external epicondyle. This pain radiates down the back of the arm and at times is so severe that the individual cannot turn a doorknob or hold a light object in his hand. It is due to an incomplete rupture particularly of the fibers of the extensor carpi radialis brevior, and it is encountered in individuals who frequently supinate and pronate the forearm, such as tennis players, wringing out clothes, using a screwdriver, and is occasionally seen in surgeons.

Palliative treatment, such as diathermy and injection of novocaine, is seldom successful. The symptoms in untreated cases will persist for from ten to twelve months. In severe cases manipulation or operation is indicated.

The manipulation that has been most successful is the one employed by bone setters who formerly appeared to be more successful than the qualified surgeons. That consists of fully extending the elbow, with one hand placed on the inner side of the elbow and the other hand over the outer side of the lower forearm. The elbow is then sharply adducted in supination and then in the mid position, then in pronation, with the idea of trying to open the joint on the outer side. This is to relieve the tension caused by the incomplete rupture of the tendon.

Osgood believed that it was due to a radiohumeral bursitis, but many operations have failed to locate the bursa. Nevertheless, the symptoms were relieved by the operation, due to the fact that the strain on the tendon was relieved.

I think it is worthy to note that in diagnosing these cases this pain on the outer side of the elbow is unaccompanied by limitation of motion, arthritis, or other joint abnormalities.

Wallace Frank, Louisville: Dr. Wood mentioned tuberculous infection of the tendon sheaths but he did not outline any treatment for this disease. This is an exceedingly serious condition and if permitted to go untreated sinuses develop from which so-called rice bodies, and they look more like cucumber seeds, are extruded. In the past two years I have treated two cases of tuberculous infection of the tendon sheaths. In one the entire wrist, both the tendons in the front and back were involved and there were several sinuses. As far as I know the treatment given this patient has not been used previously and there is no report of it in the literature. This treatment consisted of x-ray therapy. Shortly after the treatment was instituted the discharge from the sinuses lessened and then ceased and sinuses closed. The swelling of the wrist diminished considerably and the pain stopped.

This patient did have some fixation of the tendons but at the same time she had a hand that she could use.

The second case was that of a young woman aged 30, who has pulmonary tuberculosis which is being treated by pneumo-thorax. About a year ago she had a ganglion removed from the dorsum of the right wrist. Later this ganglion apparently recurred, as many of them do. Thinking it was a simple ganglion I planned to remove it. Exposure of the so-called ganglion revealed that it was composed of soft red fluffy granulation tissue which I thought was probably tuberculous and therefore removed some of this material for microscopic study. No attempt was made to excise all of the tissue and the incision was closed. Microscopic study proved this to be tuberculous infection of the tendon sheaths. This girl was treated with x-ray and the incision healed perfectly. The swelling disappeared and she now has a perfect functioning hand.

I wish to emphasize the value of x-ray therapy in the treatment of tuberculous thecitis. So-far as I know this is the first mention of such treatment in the literature.

SULFONAL DRUGS IN GENERAL MEDICAL PRACTICE

RUEL T. ROUTT, M. D.
Sonora

Before I enter into the discussion of the use of sulfonal drugs in general medical practice, I wish to explain that this paper is based upon my experience with these drugs in a rural practice: a practice in which I serve three rural villages having a population of about 300 persons each; an orphans home having a population of about 250 and the surrounding farming country. Eighty-five percent of my patients are from the families of farmers and about 60% of my work is done in the home.

For the past 4 years, during which time I have been in general practice, there have been one or two new sulfo drugs introduced each year. The volume of literature about these drugs has been so great that it has been impossible for a busy country doctor to properly read and digest all of it. It would seem that the time has come when it is not a question of whether or not to use one of these drugs but rather which drug to use. As a result of the rapidity of change in these drugs, which are probably the greatest advance in therapeutics since insulin, we have come to use them in practically every disease, often with little scientific reason and at the expense of our diagnostic ability. It is very easy to guess that a child may have pneumonia and leave a few tablets of sulfadiazine as a therapeutic test, rather than spend more time and make an accurate diagnosis. A friend of mine, who has just completed his internship, jestingly remarked to me not long ago, that general medicine was rather simple now, since all you have to do is leave your patients a few tablets of one of the sulfo drugs and forget him, because he would be cured regardless of his illness.

I believe that we are prone to prescribe too large dosage of these drugs and often overlook the fact that they are all toxic. Very often we do not see the patient during the convalescent period, while he is slowly overcoming the anemia which has been caused more from the treatment than from the illness. In a practice in which our patients are scattered and some are located in areas that are difficult to access, we often do not see our patients as often or as many times as we would like especially during the past year when we have to do some work that is ordinarily done by colleagues who have gone into the service. Under these conditions, we are prone to use these drugs more or less at random, but fortunately in most cases with most gratifying results.

Since sulfanilamide is the oldest of the sulfos, having been in use for 5 or 6 years, it is the one that was most widely used until Dagenan or sulfapyridine was introduced in England in 1938 and became generally used in this country in 1939. Sulfanilamide was greeted as a panacea, but its therapeutic limitations soon became apparent and it has gradually assumed an established place in therapy, after having been displaced in many cases by its newer and less toxic cousins. Its use has been boiled down principally to the treatment of conditions caused by the streptococcus.

In scarlet fever sulfanilamide still has a definite place although some men now prefer sulfadiazine. Four years ago we had an epidemic of scarlet fever with between 60 and 70 cases in the community. Some of these cases were mild and were never seen by a doctor, but the ones that were seen were given sulfanilamide and only one case so treated developed a complication—acute hemorrhagic nephri-

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tis. There were three other cases of acute hemorrhagic nephritis seen later in untreated cases, one of which was first seen in convulsions and died a few hours later.

Last winter we had a case of scarlet fever to develop in the orphans home in a dormitory with 20 girls in the teen age. The case was promptly removed from the dormitory. The 20 contacts were isolated and on the advice of the county health physician given 20 grains of sulfanilamide each per day for 7 days. No other cases developed. Of course this is an isolated incidence, but the drug is worth using as a prophylactic in scarlet fever contacts.

Septic sore throat is a condition that has become rather widely known to the layman as "Strept throat," so that now every layman with pharyngitis or tonsillitis wants to have someone diagnose his condition as "Strept throat." Patients with true septic throat are so nauseated after sulfanilamide and complain so bitterly of the headache, that I now use sulfadiazine and occasionally sulfathiazole with a shorter duration of acute symptoms and a resulting shorter convalescence.

Fortunately meningitis is a condition that we seldom see in the country. Sulfanilamide is the drug of choice in streptococcus viridans meningitis while sulfadiazine or sulfapyridine have become the drugs of choice in meningitis caused by the hemolytic streptococcus; meningicoccus; staphylococcus and pneumococcus. In cases in which this latter group of organisms are the causative agents, the sulfo drugs have offered hope in some conditions that prior to the advent of these drugs were almost 100% fatal. They have reduced the mortality in this group of diseases to around 33 1-3%. The trend of therapy in meningococcic meningitis seems to be to use chemotherapy alone rather than serum or serum and chemotherapy combined. The mortality in this type of meningitis has dropped in the past 5 years from around 50% to 10%.

The treatment of gonorrhea is something that most of us in general practice find distasteful, but all of us are forced to treat some cases. The treatment of this condition has undergone several changes under the influence of the sulfo drugs. Sulfanilamide was very much better than any previous method of treatment, but in this condition it has been largely displaced by the other less toxic drugs. By the use of sulfathiazole we have been able to keep our patients at work without the extreme nausea, headache and general malaise caused by sulfanilamide. Our routine treatment with sulfathiazole is 15 grs. 4 times per day for 5 days; rest 5 days; then 15 grains 4 times per day for 5 more days. Occasionally we see a case that does not respond to sulfathiazole so that it is necessary to change to some other drug. The patients are rendered asymptomatic in about 48 hours in the majority of cases, although a few have some discharge for 5 or 6 days. Because of this early remission of symptoms, it is difficult to get patients to stay under observation for a sufficient length of time. It is timely to warn that many patients become asymptomatic but uncured after inadequate dosage. Such individuals may be a serious menace to society by spreading the disease, in addition to bringing discredit to the doctor and to this method of treatment. We see much evidence of this in the patients who have been "counter prescribed" by the druggist.

Sulfanilamide is the drug of choice in chancroid and lymphogranuloma venereum. Its use without the use of the Ducrey vaccine and local treatment is of doubtful value.

Erysipelas, cellulitis and lymphangitis respond exceedingly well to sulfanilamide, but here again sulfanilamide has been replaced by the less toxic and equally effective sulfadiazine. In erysipelas the results are especially gratifying due to the shortened course and the reduction in the incidence of complications. In order to obtain results in these conditions, the drug must be started within the first 72 hours.

Tonsillitis, adenitis and otitis media are common associates of childhood. Sulfanilamide in smaller than the usual dosage is our drug of choice in tonsillitis in infants. In adenitis and otitis media we now prefer sulfadiazine since these conditions are often caused by organisms other than streptococcus, especially pneumococcus and less often staphylococcus. In otitis media extreme watchfulness must be exercised when the sulphonamides are used, as the surgical symptoms of mastoiditis are often masked.

We in the rural communities usually see from one to four cases of Tularemia every season. We have used sulfanilamide routinely in these cases principally because of the absence of a better drug. I believe that in this condition we use the sulfonals wishfully rather than from a scientific basis. My last case was treated

symptomatically and given nonspecific protein intramuscularly. This is the only one of 10 cases treated during the past 4 years, that has been ambulatory throughout the course of the disease. Regardless of the treatment in this condition, the duration of the illness is extremely long and the convalescence very slow, so that these patients are away from their work a long time.

Undulant fever is a condition that I have not seen in general practice. When I do see and recognize the condition, I will use sulfanilamide unless something better is found.

During the past 4 years I have had the opportunity to observe a boy in his early twenties with chronic ulcerative colitis. At the time of his first and most severe attack, 4 years ago, sulfanilamide was the drug most widely used. This patient was in extremus before this drug was used, because of hemorrhages from the bowel, toxicity and extreme emaciation. He was treated in a Lexington hospital and was given sulfanilamide in very large doses until he vomited, after which the drug was continued by Levine tube. After developing intra-abdominal abscesses which had to be drained, he had a remission of symptoms and was able to return to work. Two years ago he had a recurrence of symptoms and was successfully treated with sulfathiazole. One year ago he had another recurrence and was successfully treated with sulfadiazine. He has not had a recurrence since the advent of succinyl sulfathiazole. This is a case in which a young man has been restored to a position of usefulness who in my opinion would have surely died but for the sulfonal drugs.

I have had the occasion to treat a 65 year old colored man with actinomycosis of the head and neck for the past 2 years. Treatment with sulfanilamide and sulfathiazole was tried without results. Surgery was not advised after consultation. He was given three x-ray irradiations and potassium iodide in large doses of from 90 to 150 grains per day for almost one year. After 18 months this patient was asymptomatic and he has not had a recurrence during the past 6 months. This is the only case of actinomycosis that I have seen, but from the results in this case, it seems that the sulfonal drugs are of no value in this condition.

The sulfonal drugs have wrought a marked change in the treatment of infections of the upper urinary tract. This is especially true in the pyelitis and pyelonephritis associated with pregnancy. Most of these infections respond quickly to the use of neo-prontosil or sulfanilamide and it is rare that ureteral catheters have to be used or that the uterus has to be evacuated. Neo-prontosil is the drug most commonly used in this condition since it shows a rapid sterilizing action in the urine and shows few toxic reactions. Certain organisms in the urinary tract fail to yield to either sulfanilamide or neoprontosil, but will yield to sulfathiazole. If treatment is being instituted without a culture of the urine, as it is in all cases treated at home, it is well to try some of the other sulfo drugs, if there is not a remission of symptoms after adequate exhibition of any one of them.

Septic conditions both post-partum and post-abortal respond well to this group of drugs. Since most of these conditions are due to the streptococcus, sulfanilamide is the drug of choice. In these conditions, it is necessary to give large doses and to get the desired blood concentration of the drug as soon as possible. For this reason a large initial dose should be given, followed by rather large dose every 4 hours. The dosage is gradually reduced as symptoms subside. Occasionally there is little or no response to sulfanilamide, and it is necessary to use some other form of the drug. Fortunately we do not see much post-partum or post-abortal infection, probably due to the fact that the patient has an immunity to her own organisms and because there is little opportunity for cross infection. However, we work under adverse conditions in many homes where there is not proper cleanliness. Because of this we see many cases that are potentially infected. I have followed the practice of giving sulfanilamide to these patients, giving them 40 to 60 grains per day for 4 or 5 days. Here again I believe that the prophylactic use of the drug is worth while.

Since the country doctor is called upon to treat all conditions from diseases of the skin to diseases of the mind, it is necessary for us to be dermatologists. This is one branch of our practice in which we are liable to get into a rut. I once heard the statement that there were only two kinds of skin diseases; that is, those that ammoniated mercury ointment would cure and those that it would not cure. Much has been done in the treatment of skin diseas-

es, espelially those caused by staphylococcus; such as large furuncles, carbuncles, acme vulgaris, impetigo, pustular dermatitis and secondarily infected conditions such as epidermophytosis, by the use of sulfathiazole. Simple boils and carbuncles do not require the use of these drugs. In the more chronic skin conditions sulfathiazole is used in smaller doses and over a longer period of time, 7½ grains 4 times per day. Sulfathiazole ointment 5% is excellent in mild cases of impetigo or in conjunction with the drug orally in the more severe cases and in pustular dermatitis. Sulfathiazole creme gives very good results in acme vulgaris along with the drug internally.

Since the beginning of the war, we have become more conscious of the use of powdered sulfanilamide in wounds. We now use the powder in all lacerations after cleansing and debridement and before suture.

I have purposely left the discussion of the use of sulfonal drugs in pneumonia until last because this is the condition in which we get the most dramatic results. It is now the exception rather than the rule to send patients with pneumonia to the hospital. Sulfadiazine is by far the drug of choice in the treatment of pneumonia in a rural practice. It is very much less toxic than the other drugs. We now give it to all patients as soon as possible after the onset. The diagnosis is made on the history and physical findings alone and we do not attempt to type the sputum. We observe the patient closely for clinical evidence of toxic symptoms, watching the blood pressure and urine grossly every day. In practically every case treated there is a crisis within 18 to 36 hours. We continue the drug for 48 hours after the crisis and then discontinue it entirely. It is very rare that we have to start the drug again. The drug acts so quickly and effectively that our patients often accuse us of having made a mistake in diagnosis and it is often difficult to get them to cooperate properly during the convalescence. During the past 4 years I have only had two patients to die with a primary pneumonia. Both were following influenza and in pregnancy. I have seen no major complications following pneumonia after using the sulfonal drugs. If the sulfonal drugs were of value only in pneumonia, they would still be the most important drugs available to the general practitioner.

Succinyl sulfathiazole is the newest sulfo drug made available for general use. I mention it only for the sake of completeness, since I have had little experience with it. It promises to have a definite place in the infections of the intestinal tract as well as a place in intestinal surgery.

SUMMARY

The sulfonal drugs are the most valuable group of drugs in the armamentarium of the general practitioner. Their use in many infections has proved of little or no value, but they are especially effective against pneumonia, meningitis, gonorrhea and certain types of sepsis. They have a definite place as prophylactic drugs in scarlet fever contacts, wounds, and potentially infected cases after partuition and abortion.

DISCUSSION

D. G. Miller, Jr., Morgantown: I am in a far more isolated section than Dr. Routt and have had a few more years experience. He has omitted one of the most important things we have found, and that is the treatment of dysentery. We formerly had between 50 and 80 children of two years and younger who died with dysentery and enteritis in Butler County. During the past three years we have had from one to three children die each summer, and these were moribund when first seen.

I began to use these drugs on the idea that if a child had a bloody stool he must have an ulcer in the colon and that there were bound to be a certain number of streptococci in the ulcers. Sulfanilamide gave such good results that we have continued through the sulfonal drugs that have been added, and at the present time largely use sulfathiazole.

We have been using a suspension or emulsion with acacia. Children take that flavored with syrup of orange very well, and we have much less nausea. I have also tried some succinyl sulfathiazole for dysentery with good results, but the cost at the present time is prohibitive.

We also use the drugs for kidney infections, largely in suspension.

During the past summer we have had more pneumonia than we have had during any winter, and the children have taken sulfathiazole well for that.

We don't see our pneumonia patients more than once. Usually they come to the office wanting some cough medicine, and that is the last time we see them.

Major Robert A. Bier, Washington, D. C.: I don't know whether I should mention this in a symposium on sulfonamide therapy, but I would just like to bring to your attention

something that has come to our attention in the service, and that is the incidence of some atypical pneumonias. In various parts of the country there are a great number of these atypical pneumonias. They usually are not very severe. There are very few or practically no fatalities, but it seems that the sulfonamides are of no use and in some cases are contraindicated. The clinical course is a rather severe respiratory infection with rather marked cough, a deep grunting cough, and some headache. It runs a rather slow course. I just mention that because I am sure some of you men may have experienced the same thing with the sulfonamides in this type of infection.

A. T. McCormack, Louisville: I would like to call your attention to the fact, because I think it is an excellent exhibition of what Procurement and Assignment is doing, that the man who wrote this paper and the man who opened the discussion have been retained at home in spite of the fact that they wanted to get in the Army, and other men like them have been more irritated with us because we retained them at home than the men who have gone in the Army have been irritated because they were urged to go in the Army, but there has been just as much pressure to get men to go who ought not to go—it is not an unholy pressure, but as much pressure as we have in any other respect. The men who have gone into the Army largely have gone from cities of the first, second and third class, and we have retained at home all those we could from such rural sections as Dr. Routt and Dr. Miller represent. The only men who have gone from those sections were those who were already in the Reserve Corps or in the Militia, and in some cases we were robbed entirely of doctors in some sections by that, but I want you to know the kind of medicine that is being practiced by these fellows that have been kept at home, and they are caring for the people, and each one of them is caring for four or five thousand people.

Tuberculosis is increasingly becoming a disease of older, occupied men. So much emphasis has been placed on tuberculosis as a serious disease of girls and young women that its greater havoc among men has not received the attention it deserves. As a result of the more rapid decline of tuberculosis in females in this country there are today 132 deaths among males to every 100 deaths in females, and only at ages ten to thirty is the mortality higher in females. From The Modern Attack on Tuberculosis by Henry D. Chadwick, M. D. and Alton S. Pope, M. D.

MEDICAL TRENDS IN THE UNITED STATES

EMMET F. HORINE, M. D.
Louisville

In this troubled world today, with uncertainties greater than ever before in history, physicians find themselves engulfed in the maelstrom. The crisis through which we are passing will unquestionably lead to profound changes in our lives, both social and economic. These changes must of necessity markedly affect physicians, and it is well that we pause and consider the possible trends.

From the time of Hippocrates the medical man has been an individualist, carrying his own responsibilities as a servant of humanity. Sir Thomas Watson, in the introductory paragraph to his classical PRACTICE crystalized the ideals of medicine in a few words:

"The profession of medicine, having for its end the common good of mankind, knows nothing of national enmities, of political strife, of sectarian dissensions. Disease and pain the sole conditions of its ministry, it is disquieted by no misgivings concerning the justice and honesty of its client's cause; but dispenses its peculiar benefits, without stint or scruple, to men of every country, and party, and rank, and religion, and to men of no religion at all. And like the quality of mercy, of which it is the favourite handmaid, it blesseth him that gives and him that takes; reading continually to our hearts and understandings the most impressive lessons, the most solemn warnings. It is ours to know in how many instances, forming indeed a vast majority of the whole, bodily suffering and sickness are the natural fruits of evil courses; of the sins of our fathers, of our own unbridled passions, of the malevolent spirit of others. We see, too, the uses of these judgments, which are mercifully designed to recall men from the strong allurements of vice, and the slumber of temporal prosperity; teaching that it is good for us to be sometimes afflicted. Familiar with death in its manifold shapes, witnessing from day to day its sudden stroke, its slow but open siege, its secret and insidious approaches, we are not permitted to be unmindful that our own stay also is brief and uncertain, our opportunity precarious, and our time, even when longest, very short, if measur-

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ed by our moral wants, and intellectual cravings."

Last year you recall that the American Medical Association was accused of and tried for violating the anti-trust laws. Very briefly the American Medical Association, the Medical Society of the District of Columbia, two associated societies with twenty-one officers and individual members of these societies were placed on trial for conspiring to restrain the Group Health Association, an organization which undertook to furnish government employees with medical care for a flat monthly fee. The Group Health Association was presumably a cooperative movement, but was subsidized by the Home Owners Loan Corporation and private sources. It advertised for and solicited members in addition to using coercion to require employees of various government departments to join. The American Medical Association insisted that arrangements of this type would lower the standards of medical care and, because of this and the ethical considerations involved, refused to have any professional relations with the physicians hired by the Group Health Association. The verdict was a most unusual one in that the American Medical Association and the Medical Society of the District of Columbia were found guilty, while all of the individual defendents were acquitted. On appeal to the United States Court of Appeals for the District of Columbia, the conviction was sustained. Ultimately it is hoped that the United States Supreme Court may grant a hearing. The Washington (D.C.) Star commented on the verdict as follows:

"From the common sense standpoint it seems illogical to hold that the two organizations could have been guilty of a conspiracy if the individual members were innocent, but, as a matter of law, the verdict falls within the instructions given the jury by the trial judge. The intent of the accused in doing certain things is the all important factor in conspiracy cases, and it may well be wondered how two organizations, as organizations, could have entertained a criminal intent in the absence of any such intent on the part of their constituent members. There is precedent for such a split verdict, however, where intent is the essential element."

For years before the Group Health Association attracted attention, much experimentation had been going on with reference to providing medical care on a low cost basis. Unquestionably no uniform method will be feasible in all states because it is manifest that a plan which would work in an industrial area could not be applied successfully in an agricultural community. The American Medical Association, after careful study, recognized this and believed that the component county medical societies and state associations should deal with the questions involved in their own communities. In many of the previous schemes laymen or lay groups have been in control and, in essence, corporations have entered the practice of medicine with the idea of profit. The corporate practice of medicine is illegal in many states, but regardless of this, such a plan tends to lower the standard of medical service and to exploit the physician. The limits of this paper will not permit a discussion of various plans, but certain fundamental features of any acceptable plan may be mentioned. Primarily, approval of the medical society in the locality to be served stands first, and with this would go the assurance to the patients participating that the standards of service would be as high as any in the community served. Free choice of a physician should be allowed which would permit protection of the individual relationship between doctor and patient. Group hospitalization has been quite successful in most places where it has been tried, and a somewhat similar plan for medical care could be evolved. It does not seem impractical to develop a voluntary cash indemnity insurance plan which would cover the cost of either emergency or prolonged illness. The basic necessity is cooperative effort.

In the refashioning of the United States Government which is taking place today, the individualistic pattern is being changed to that of regimentation. With the rapidly changing revision of our government, total state medicine appears probable. In the past we have recognized the necessity of governmental control of epidemics and the "public health" physician has been welcomed by the intelligent medical practitioner. Gradually the masses have come to believe and are now asking that the State not only control communicable diseases, but furnish medical attention for all types of illness. The recent poll conducted by Roper for Fortune disclosed that 74.3 per cent of our inhabitants thought the government should collect enough taxes after the war to furnish

medical care for everyone. Some politico-sociologists and economists are fully alert to this situation and are engaged in planning for the socialization of medicine, regardless of the unfortunate and unsatisfactory experiences in Europe and New Zealand. Mr. Arthur J. Altmeyer, Chairman of the Social Security Board, made the following statement to Congress in July, 1941:

"Our eventual goal should be the establishment of a well rounded system of social insurance to provide at least a minimum security to individuals and their families due to unemployment, sickness, disability, old age and death. In addition, we must provide a series of constructive social services to supplement the cash aids provided under social insurance. Medical care should be available to individuals and their families so that we may build a healthier, happier nation. Such a system of medical care should be instrumental in reducing the costs of cash payments for sickness and disability."

At this time a very pertinent question might be asked: "How would the average individual fare under a total state medical system?" Primarily his place of residence would determine the visiting physicians to whom he would be assigned whether he liked them or not. If hospitalization were required there would not be any choice but he would be ordered to the hospital for his district. The frequency of visits by the physician would be regulated by the control medical bureau and the need for consultation or operative intervention would be subject to the orders of the same bureau chief. If the control bureau office were closed the patient might have to wait for hours before his pain could be relieved or the necessary operation performed. As a patient he would merely be a case number and, like it or not, he would receive the same impersonal perfunctory attention which the others obtained. I am sure the average American would need undergo only one moderately severe illness to make him heartily curse the day when total state medicine made its appearance. Further, and what the patient would not realize, is the fact that there, inevitably, would be a gradual deterioration in the standard of medical service. The regimentation of the European countries has markedly lowered initiative and thus impeded progress. We develop individuality either through our inward urge to study and accomplish or through the drive of economic insecurity. In addition, physicians have always considered their vocation as a service to humanity which has acted as an added stimulus to their efforts. Shall we, as physicians, realizing all the above to be true, stand idle while the United States is saddled with total state medicine at a cost of more than a billion dollars annually? As a group, in the past, we have been asleep to the necessity for educating the public concerning medical achievements. We have haughtily ignored the accusation that organized medicine has imposed upon the public. We have not challenged the repeated statements of some quasi politico-sociologists that only government control of medicine can provide complete and efficient medical care. Unless we show the falseness of the accusation that the public has been imposed upon, and unless we expose the suicidal doctrine that a paternalistic state can provide everything including medical care, total state medicine is a certainty.

Ordinarily I am far from pessimistic, but the more I have studied and thought of our present plight, the more convinced I am of the probability of total state medicine. We still have a chance to prevent its adoption but the time is short. Primarily, we need to increase our dues to a figure which will permit the employment of a competent full time public relations director in each state and large city. Adequate funds must be provided for advertising. The campaign should be carried forward along several specific lines. First, the public must be adequately informed concerning the marvelous achievements of medicine. Courses designed to teach the prevention of disease must be started and the public made to realize that we are interested in preventing disease as we have always been, although we have never publicized the fact. Some form of cash idemnity insurance or periodic pre-payment plan upon a voluntary basis to cover illness must be devised. This will take care fully of the middle income groups. Finally, it is vitally important to establish a harmonious relationship between organized medicine and the government whereby public funds may be made available to reimburse physicians for medical care of indigents. This rightful obligation of the state has been carried by physicians without complaint, but with the changing order it is high time that this too shall change. To make sure that such changes as will come are for the better, the initiative must be taken by organized medicine.

In the event that we fail in our efforts and state medicine should come, we, as an organized group, must obtain professional control. By so doing the lowering of medical standards may be prevented. We must define what constitutes adequate care and see that it is furnished. The control medical bureau under a system of state medicine should not be permitted either to dictate the number of visits to be made or to indicate the drugs to be used. In some way the sacred individual relationship between doctor and patient must be preserved.

In summary, physicians are facing a profound change in the plan of administering medical care. The trend seems toward total state medicine which only by immediate, diligent and concerted efforts may possibly be prevented.

DISCUSSION

A. T. McCormack, Louisville: I think we should be profoundly grateful to Dr. Horine for having made the study necessary to present this subject to us. In its various phases it has been presented time after time. It is very much like when we go to church; we hear them talking about sin, and while we are at church we don't sin, but the resultant operations on Sunday afternoon and Monday morning look very much as if we hadn't heard the sermon. We refuse to be aroused to the needs of the times; we as a profession refuse to arouse ourselves to the danger in which we are placed at the present time. It is very real, and it is of our making entirely, in that the profession in most states have bitterly attacked everybody who have talked about socialized medicine personally, and thrown rocks at them. It doesn't do a bit of good on the face of the earth, because this is a purely economic, social and professional question that is going to be worked out by reason and can only be worked out by reason.

There are certain very fundamental things in this discussion that Dr. Horine brought out. We want to preserve in Kentucky, and, in Kentucky, we propose to preserve the control of medical organization and medical service for our people. However, as we have seen in other social legislation, the tendency toward the ease with which taxes are promoted for the purposes of social reform is one of the subtle things that has developed in socio-economic legislation and policies in the last few years.

No voluntary health insurance plan has ever been proposed in any country and accepted for longer than ten years without resulting in compulsory health insurance. That is one thing we have to see right away. Only the wise will buy the policies, and they pay their bills anyhow. It makes it easier for them to pay them, but they pay them in the long run anyway, and the unwise and the people who are careless about their affairs don't take voluntary insurance, and they are the ones who don't pay for service and the ones that most frequently don't get it because they know they are able to pay for it, and if they don't pay for it there is no reason for our taking care of them, just simply because they are going to have to take care of themselves.

With the poor it is an entirely different proposition. In all of the schemes in England and in all the other countries that have adopted social insurance, the care of the indigent has been left out of the scheme entirely, and in this country they talk about universal medical care, but they don't mean that; they mean care for the man of average income who is getting the best medical care in the United States that any group has ever gotten anywhere in the world, and at a price that he can ordinarily afford.

On top of all these other things, we are now faced by a superlative difficulty that, of course, will come during this emergency of war and will be emphasized during it. In Kentucky there will be the occasional situation where four doctors are left in a county, or ten doctors are left in a county, and two or three of them suddenly go down with a broken heart, or die, and that county is left with inadequate medical service. More than forty of our counties have had inadequate medical service for twenty years. Under our unfortunate educational system where we are training everybody to stay in town and work in a hospital and become either a partial or complete specialist, we tend to concentrate the men in town. One of the most far-seeing and wisest plans is to leave the town. In Kentucky, the average doctor outside of Louisville has better income than the man in Louisville, lives better, has less expenses, is far happier, and has a better chance to go to heaven, but with our training system we don't teach them that. After you have kept a man in a hospital as an intern, which is absolutely essential to make a doctor and is an integral part of his education, and you keep him as a resident for five to seven years, he can't practice in the country because he just doesn't know how to walk over rocks unless he has a lot of original country blood in him.

We can't continue that system without destroying ourselves. That is one of the elements in our present loss of confidence in the ability of the profession to so distribute its members that they can furnish medical service to the

farmer and miner, and, after all, medical service to the farmer and miner is the only thing that is absolutely essential to the continuance of our civilization as far as medicine is concerned. It doesn't make a bit of difference whether anybody in town is treated; it doesn't make any difference whether anybody in industry is treated by doctors or not, as far as the ultimate preservation of civilization is concerned. The farmer and miner have built every city, the farmer and miner have built every industry and has financed every progressive thing that has been done in the country, because the farmer and miner are the only ones who make any original contribution of wealth to the country. If we don't preserve our farmers and miners and can't keep them on the farm and in the mines, unless they have medical service available, they will come to town; they have the lure of the larger money income. We have gotten to be pretty universally worshippers of the golden calf and we are getting in the same fix our Hebrew brothers were when they were trekking across the desert and they had forty years' punishment for their sin, and we are going to have forty years' punishment in the wars for ours. The gold at Fort Knox is a perfectly idle and useless thing, as useless as a toy compared to the service that we can render to one another.

We are going to preserve ourselves; we are going to make this redistribution of our professional services, and we are going to work out the plan to do it under professional auspices.

As Dr. Horine has so well said, he has been aroused to this thing from his studies. As he said, there was a very significant paragraph in yesterday's paper to those of us who are on the inside. The War Manpower Commission appointed a social worker as regional director in Kentucky to arrange for medical care for the people of the rural districts and of the industrial sections that haven't such medical care. Why? Because we haven't done it; we haven't done it at all; we haven't been able to get either the American Medical Association or any state medical association up to the present time to undertake any such program. We propose to do it in Kentucky because we propose to be the head of the house and propose to retain control of the house of medicine.

It is just such papers as Dr. Horine has presented to us that arouse in us the determination to do that. That is hard to do, because very few of us read the **Journal of the American Medical Association**, very few of us read the newspapers. I have asked eighteen men this morning if they saw that paragraph yesterday, and I haven't found anybody that did. They wouldn't recognize its significance, in all probability, if they had read it, but until we can keep ourselves in touch with the lines of progress in Government today and unless we can keep ourselves alert and do our job right, we are the richest prize that is laying loose to be captured by somebody, and we are just as certain to be enslaved by a group of social and welfare workers as the morrow is to come unless we can arouse ourselves to a determination to give ourselves absolutely and completely to the service of our people through medicine so that we retain the confidence they have in us.

You heard the Governor say last night that they had confidence in us in Kentucky, that they were going to follow our leadership, that whatever medical service and whatever public health service was given was going to be determined by the medical profession. We can continue that in Kentucky, but we are lost in the nation unless we can arouse in our sister states something more than a mere feeling of anger, because anger didn't help the Belgians and the Poles and the Czechs or anybody else; it was too late. We can't continue a system of appeasement indefinitely without our destruction.

I am glad Dr. Horine read this splendid paper. I hope you will read it when it comes out in the Journal, and read it to every other doctor you can find, and then talk to the leaders of public opinion in your neighborhood about it, that we may build our defenses solidly by having a united profession that will follow its leadership in Kentucky in the determination that we shall control the house of medicine, not for any selfish benefit for ourselves, but for the protection of the health and lives of the people we serve and love in the Commonwealth to which we have given all we have.

Insulin Shock and White Blood Picture in Allergic Patients.—Rausch and Bartelheimer demonstrate that the therapeutically employed insulin hypoglycemia produces in patients with asthma a change not only in the allergic manifestations but also in the white blood picture. Depending on the intensity of the increase in leukocytes produced by the insulin shock, two groups can be differentiated: asthmatic patients without inflammatory symptoms, in whom the total leukocyte count is at the most doubled, and those with accompanying inflammation in whom it increases to two, three or four times the previous count. The neutrophil granulocytes are the ones which show the greatest increase during the augmentation in the total leukocyte count. The lymphocytes rise parallel with the neutrophil granulocytes until the maximum shock is reached, then decreased.

CARE OF THE NEWBORN

W. W. Nicholson, M. D.
Louisville

Care of the newborn baby is one of the many responsibilities placed on the shoulders of the general practitioner, better known as the family doctor. The proper care of the newborn is in itself a large, complex and important subject, and if rightly handled, has a great influence upon the safety and health of the baby. The diet, hygiene, and medical care of the mother during the antenatal period is highly important, but will not be discussed here.

The minimal examination due a newborn baby, embraces a general inspection immediately after birth to see if resuscitation is required, and, later, a thorough examination to see if any abnormalities are present, to determine if there is any evidence of hemorrhage, and to check its general progress. On discharge from the hospital, another thorough examination should be made, followed by daily inquiries as to the baby's progress, its weight, temperature, bowel movements, intake of food, and especially as to vomiting.

During birth and immediately thereafter, the placental respiration gives place to pulmonary respiration, and from thereon the infant breathes its oxygen directly from the atmosphere. Therefore, the neonatal respiratory tract must assume its function within a relatively short time after birth. We should avoid giving sedatives to the mother shortly before birth, because of its delayed action on the baby's respiration.

After birth the baby should be placed in a warm blanket and the mucus gently removed from the mouth and throat, waiting 2 to 3 minutes by the clock for the baby to breathe. If further resuscitation is necessary, oxygen may be given. If mouth to mouth breathing is required several layers of gauze should be placed over the baby's mouth, and the operator should be very careful not to use too much pressure. Drugs, such as alphalobulin, are of questionable value. Brenneman sums up the methods of resuscitation as: first, clean the air passages; second, supply warmth; third, supply oxygen; fourth, stimulate respiration; and fifth, be gentle.

Read before the Kentucky State Medical Association, Louisville, September 28-October 1, 1942.

After the mother is taken care of, a thorough examination of the baby should be made and a 1% silver nitrate solution instilled into the eyes. This should not be left to the nurse. The cord should be tied securely and a sterile dressing placed on it. A general inspection should be made for abrasions or lesions; the weight and length taken, and the circumference of the head and chest recorded. These measurements help to determine the maturity, and it is important from the standpoint of future management to know whether or not the infant is premature. Usually, it is easy to make a rough estimate of maturity, but accurate determinations are difficult. Birth weight of 5½ pounds and body length of 18¾ inches are usually considered the lower limits of maturity.

The skin at birth is of a purplish red color, which is most pronounced over the extremities, and which quickly changes to pink within 24 hours. A brilliant (boiled lobster hue) appearance is seen in some babies. Pallor immediately after birth is found in shock, injuries, or massive hemorrhage. Cyanosis, general or local, indicates imperfect oxygenation from some cause, such as cardiovascular or pulmonary defect, and should be taken seriously. The numerous drugs used to render labor painless have resulted in an enormous number of babies being narcotized at birth. These infants add to the number of cases of asphyxia and atelectasis due to other causes and increase the incidence of respiratory deaths far beyond all reasonable proportions.

The head should be inspected for lacerations, bruises, cephalhematomata which in general clear up, but I have seen two babies bleed almost to death from a cephalhematoma. The fontanel should be felt to be sure that it is not bulging. The pupils should be equal and react to light. The weak, feeble cry or whine may indicate intracranial injury or bleeding and is always a serious sign.

The anteroposterior diameter of the chest is about the same as the lateral diameter. The respiration of the normal baby is from 30 to 70 and generally the type is abdominal. If the respiration is shallow or irregular atelectasis should be considered. The heart is rapid and the sound is easily heard. Loud systolic murmurs heard over the entire chest generally indicate congenital heart disease, but absence of a murmur does not rule out this condition. Where other congenital abnormalities are

found, such as club feet, web toes, or hair lip, the condition of the heart should be examined especially carefully.

After the baby is examined and abnormalities, if any, determined, it should be placed in a warm bed, preferably in the same room with its mother. The present hospital methods of placing all new born babies in one large nursery may be ideal for the mother, and the hospital, but it certainly is not good for the baby.

In regard to the care of the skin, much has been written in the past few years as to the use of oils, soaps, and water, or doing nothing in the way of cleansing except wiping off the blood and mucus and leaving the vernix caseosa intact on the baby. No matter how the baby's skin is cared for, pustula dermatitis will invariably occur if the nursery is overcrowded or there is insufficient or inadequate personnel. In what hospital haven't you seen the nursery overcrowded with babies and not a single extra nurse added to the staff? And often in overcrowded nurseries, there is seldom sufficient personnel at night. No one nurse is capable of caring properly for over 4 or 6 newborn babies. It is in the overcrowded nursery that we see impetigo and other infections, such as diarrhea and acute colds, break out. Any newborn presenting a lesion suspected of being impetigo should immediately be isolated in a separate nursery, with separate nurse personnel. As to the medical treatment of the lesion, I do not think it matters much. With proper hygiene, the pustules are looked for daily and often, and as soon as one is found it is ruptured and some antiseptic applied. No matter what technique may be used in the nursery, it must ever be remembered that there can be no substitute for aseptic nursing technique for avoidance, not only of impetigo, but of other infections.

Upper respiratory infection in the newborn nursery is another problem. No one with a sore throat or cold should be allowed in the nursery. Few institutions require nurses and internes with colds and sore throats to stay out of the nursery; unfortunately, the physicians are the chief offenders. If the infection is due to virus, it is difficult to see how several layers of gauze will stop the virus, when a Berkefield filter will fail. Altogether, I feel that the rule of wearing a gown and mask in a nursery is a good one, because it will keep many physicians and other personnel out of the nursery.

The initial loss of weight by the newborn is physiological and should not be combated except by giving water and placing the baby to the mother's breast. The habit of giving artificial food the first few days of life is vicious and may cause serious digestive disturbances. If on the 4th or 5th day, the baby is not getting enough milk from the breast and develops a dehydrated temperature, subcutaneous fluids may be given.

FEEDING: The great majority of normal infants can and should be fed at the breast by their mothers. She should be able to supply the greater part of the infant's food, the balance being made up by artificial feeding. A small proportion of women, however, are incapable of nursing their offspring. There is general agreement that breast feeding is of even greater importance during the first few weeks of life than in later infancy and, if successful, is one of the most decisive factors in promoting health and good progress. Breast feeding should, therefore, be encouraged wholeheartedly by both the practitioner and the nurse. This responsibility lies chiefly on the physician who delivers the mother. As he knows her condition better than anyone else he is best capable of deciding whether or not the mother is able to nurse her baby.

DISCUSSION

L. T. Minish: Frankfort: When I was actively engaged in this type of practice it seemed to me one of the most common ailments of the newborn was cerebral hemorrhage, which, by the way, quoting from the statistics of a New York Lying-In Hospital of several years ago, ten per cent of 500 consecutive spinal punctures showed blood in the spinal fluid or blood-tinged spinal fluid.

Icterus was also a frequent occurrence, and most cases required little treatment, maybe a few doses of calomel if the digestion was impaired. However, there are rare cases of a malignant type and when found are a manifestation of grave systemic derangement, usually general septic infection.

Gum was also common. It is a sort of acne, usually due to irritation of the skin by atmosphere and clothing. Treatment consists of cleanliness, proper clothing, and some simple ointment, perhaps as a salve to the mother's anxiety as much as to the infant's skin.

Impetigo, as Dr. Nicholson has said, is usually found in the overcrowded nursery, but I should think with immediate isolation and the use of sulfa drug ointment the cases would soon be cured.

There are many other diseases and deformities that a newborn baby may have, such as atelectasis, which is not so easy to diagnose, but may be made by roentgen ray study, but the prognosis is necessarily grave, syphilis, septic infection of the lungs, pneumonia, mastitis, umbilical hernia, spina bifida, imperforate rectum, etc. I have seen a few cases of pyloric spasm. Some responded to medical treatment; others required surgery.

Nursing of the baby by the mother, as pointed out by the essayist, is a big problem, and I agree that breast feeding should be encouraged wholeheartedly by both the doctor and the nurse, even if it can be carried out only for the first few weeks.

I wish to thank Dr. Nicholson for giving us this paper on such a timely subject, and express my appreciation for the opportunity to discuss it.

A. T. McCormack, Louisville: I wish every mother in Kentucky could have had her ear to an earphone and could have heard what Dr. Nicholson said, and that every hospital administrator and every doctor could have heard it, because I think that is one of the most valuable papers I have heard in a number of years. He has returned us to common sense in the practice of midwifery and in the care of children.

This mass production of babies that has been brought about for the convenience of doctors in the cities and for the idea of making it easier for mothers to be mothers by giving babies all sorts of artificial food immediately is one of those departures from common sense that is absolutely inexcusable. I am glad to see Dr. Nicholson bring us back to earth.

The only thing that was more natural about his presentation in this paper than anything else was the fact that somebody else read the paper, because Nick very rarely says anything himself, but whenever he does he says something that is awfully good, and I hope whoever sees him will give him the love that everybody here has for him, and our regard for him, and I hope he will soon be alright and well again.

Philip Barbour, Louisville: I would like to emphasize one thing about Dr. Nicholson's paper, and that is the importance of breast feeding in the child. We realize from greater experience in life that the mother's milk is the very best milk for the child, under most conditions.

A. T. McCormack, Louisville: Dr. Barbour, oughtn't you also emphasize the importance of breast feeding from the viewpoint of the mother, because the child doesn't have that vote and the mother does. A mother who doesn't nurse her child has missed one of the greatest privileges in life and she never does know just exactly how a mother feels if she doesn't nurse her baby. The poor woman who is deprived of nursing her baby has missed one of the greatest experiences of a mother. We ought to put emphasis on the mother instead of the baby.

Philip Barbour: You are talking from the standpoint of the obstetrician. I am talking from the standpoint of the pediatrician.

One thing which our city obstetricians don't know is that unless you milk a cow dry she is going to go dry. It has been my misfortune to see many mothers come out of the infirmaries with great big breasts full of milk, and on about the tenth or twelfth day the breasts have gone absolutely dry. Why is that? They do not realize that the breast should be emptied completely. The breast should be pumped out regularly after each nursing to get rid of the remains of the milk, and then the mother's milk will be continued. If you let the breast fill up with milk and it is only partially emptied, time after time, the breast gets tired of making milk when it isn't needed and it soon dries up.

I know most of you boys around the country have milked cows, and you know you must milk a cow dry if you don't want her to go dry. Why not get that across to the mother? I have done my best to get it over to our city obstetricians who have never seen a cow except in a picture, and they do not know this from their personal experience. I have often had a hard time with these children on artificial food when the mother ought to have done her duty, and made the feeding and proper development of the child easy.

BOOK REVIEWS

WAR MEDICINE, A SYMPOSIUM: Edited by Winfield Scott Pugh, M. D., Commander, (M. C.) U. S. N., Retired, formerly surgeon, City Hospital, New York. Associate Editor, Edward Podolsky, M. D., Technical Editor Dagobert D. Runes, Ph. D. The Philosophical Library, 15-E. 40th Street, New York City, Publishers. Price $7.50.

This volume is very timely and well written. It discusses the various diseases and their treatment that are encountered during war and battle, such as War Wounds and Anerobes. Treatment for Severe War Wounds of the Chest, Injuries due to high explosives, Blood Substitutes in Military Service, march fracture. The illustrations are numerous and illustrate thoroughly the subjects described. This book is valuable and necessary to the physician and surgeon in the Service.

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COUNTY SOCIETY REPORTS

Boyd: The January meeting of the Boyd County Medical Society was held on January 5th at the Henry Clay Hotel. The following visitors were present: Harold Marks, Past-Assistant Surgeon U. S. Public Health Service, Chicago, Chas. Johnson, Russell, and E. H. Maggard, retired.

The following committee was appointed relative to our men in service paying dues: Drs. Bryson, Winans, and Kercheval. Also a committee composed of Drs. Smith, McGehee, and Goodman to meet with Joe Mathewson relative to Medical Insurance.

Proctor Sparks was elected Vice-President in the absence of Marvin Prichard who has gone to study further.

Reports of the following cases were made: Gun Shot Wound in Abdomen, by S. C. Smith; Pyloric Stenosis in Three Weeks Old Infant, Operation Under General Anesthetic With Complete Recovery, by A. J. Bryson; and Examination of Hearts at the Induction Center, by E. C. McGehee.

Harold Marks addressed the meeting and gave an instructive account of Coast Guard work and Public Health, having been called to Ashland on account of the flood condition.

Price Sewell furnished all present with cigars in honor of his new baby boy.

R. G. Culley, Secretary

Boyd: The February meeting was held at the Henry Clay Hotel on February 2nd. The following members and visitors were present: Drs. Skaggs, Gambill, Bryson, Daniels, Kercheral, Rice, McGehee, Smith, Cooper, Goodman, Proctor Sparks and Culley. Visitors were Dr. Snyder, from Catlettsburg, Dr. Krueger, Federal Correctional Institute, and Dr. Johnson from Russell. The committees made their various reports, the main one being for the society to pay the dues of their members in Military Service. The death of M. D. Garred's mother was announced and flowers were ordered sent from the Society.

A most interesting paper was read by Dr. Daniels on report of case, Brain Tumor in Aged Lady. It was discussed by Drs. Krueger, Johnson, Cooper, and Kercheval.

The following members are in Military Service: Capt. H. E. Martin, Lt. J. E. Moore, U.S.N.R., Capt. Walter F. Williams, Maj. C. C. Woods, Lt. Harry J. Stone, Lt. Com. C. C. Sparks, U.S.N.R., Lt. R. W. Gardner, Lt. Paul E. Holbrook, Lt. Geo. M. Bell, and Maj. M. D. Garred, all of Ashland and Dr. Hubert Prichard of Catlettsburg.

R. G. Culley, Secretary

Campbell-Kenton: The regular monthly meeting of the Campbell-Kenton County Medical Society was held at St. Elizabeth Hospital on Thursday, February 4th, with seventeen members present. The meeting was called to order by the President, N. A. Jett, at 9:00 P. M. The minutes of the previous meeting were read and approved.

A letter of thanks was read from the family of Martin Sauter.

For the program committee, Dr. Bach reported the program for the first half of the year has been filled. Dr. Heiselman will present a paper at the next meeting.

An excellent paper was read by George Burger on Preoperative and Post Operative Care. The paper was generously discussed by Edward B. Mersch, W. R. Miner, G. H. Zwick, Joe and Ed Northcutt and W. J. O'Rourke with closing remarks by George Burger.

There being no further business the meeting was adjourned.

Robert L. Blitz, Secretary

Daviess: On January 26th, 1943, W. H. Parker presented a paper before the Daviess County Society on "The Use of Methyl-Testosterone." On February 9, 1943, J. M. Coffman will present a paper on "The Little Things in the Practice of Medicine." Members of the Society in Military Service are as follows: Haynes Barr, H. N. Burkhead, (Africa,) Howell J. Davis, John Dixon, Leslie C. Dodson, J. E. Hix, (Africa,) Hubert Medley, R. J. Oldham, (U. S. Navy,) R. S. Sumner, Lee Tyler, T. H. Milton.

This only leaves Daviess County and Owensboro a total of 26 members. Five of these are specialists and only nine of the remaining twenty-one are under sixty years of age, with a total population in the city and county of 55,000.

W. H. Parker, Secretary

Fleming: The Fleming County Medical Society was called to order by President C. L. Garr. The following members were present: C. L. Garr, W. A. Graham, B. F. Allen, O. A. Gray, W. T. Jessee and Roy Orsburn.

The minutes of the previous meeting were read and adopted.

There was some discussion as to the prices for making visits in various sections of the county. This was opened by W. T. Jessee who had recently opened an office in Flemingsburg. Some correspondence was read and disposed of.

Officers elected for the year were as follows: President, B. F. Allen; Vice-President, O. A. Gray; Secretary-Treasurer, Roy Orsburn.

C. L. Garr whose time had expired as censor was reelected to succeed himself.

W. A. Graham was elected Delegate to the meeting of the State Medical meeting, and O. A. Gray alternate.

Fleming County has lost two of her youngest physicians, J. R. Cummings has joined the Army, and R. H. Bradshaw the Navy.

Roy Orsburn, Secretary

Henry: The meeting of the Henry County Medical Society was held at the office of the secretary on January 14, 1943. Those present were: G. E. McMunn, Maurice Bell, A. P. Dowden, O. P. Goodwin, O. P. Chapman, J. C. Hartman, F. D. Hancock, R. J. Skidmore, Atto Cubbage and Owen Carroll.

The society was entertained at dinner by Dr. McMunn and Dr. Carroll. This meeting was called for the election of officers. G. E. McMunn was elected President; J. C. Hartman, Vice President and Owen Carroll, Secretary. Maurice Bell was elected Delegate and O. P. Chapman, Alternate. Atto Cubbage, D. D. S., R. J. Skidmore, D. D. S., were accepted as members as was J. K. Karnes, Veterinarian.

It was unanimously decided that the society will meet the second Thursday of each month. Each meeting will be a dinner meeting, the dinner program to be furnished by each doctor in alphabetical order.

The society paid the State dues of the two doctors, W. P. McKee and T. Hunt Jones, who are in the armed forces.

Atto Cubbage will entertain the society on February 11th. He will furnish a program which will be dental. Dr. Cubbage will entertain at dinner for the members of the Society and their wives.

Owen Carroll, Secretary

Hopkins: The Hopkins County Medical Society held its regular meeting at the hospital at 7:30 P. M. with the following members present: Drs. W. F. Stucky, Wm. H. Garnier, F. P. Strother, A. F. Finley, C. R. Morton, I. J. Townes, J. R. Corum, and M. S. Veal.

Business pertaining to the hospital was discussed and transacted.

The following officers were elected for the year: F. P. Strother, President, I. J. Townes, Vice-President, Wm. H. Garnier, Secretary-Treasurer.

W. F. Stucky, the retiring president, was elected delegate to the State meeting, and J. R. Corum was named as Alternate.

Drs. Finley and Veal were appointed to serve on the program committee for the next meeting.

W. H. Garnier, Secretary

Jefferson: The 857th stated meeting of the Jefferson County Medical Society was held Monday evening, January 18, in the Roof Garden of the Brown Hotel. There were 136 members and guests present. After the dinner at 7:00 P. M., the President called the meeting to order at 8:20 P. M., when the ballots were passed.

The President announced there would be an opportunity to make nominations from the floor, if that was desired.

The President named the following as tellers: Uly H. Smith, Chairman; Oscar Bloch, Jr., C. A. Boone, Benjamin L. Brock, J. S. Bumgardner, James Robert Hendon, H. C. Herrmann, J. K. Hutcherson, Arthur L. Juers, George F. McAuliffe, Irving Perlstein, F. C. Pirkey, E. L. Shiflett, Rudy F. Vogt, T. A. Woodson, and Charles F. Wood.

The President introduced the guests: Mr. C. P. Loranz, Secretary-Manager of the Southern Medical Association and Colonel William Southard, Commanding Officer at Nichols General Hospital.

The President made a report on the participation of medicine in the war.

The Secretary's Report was accepted as read, and filed.

The report of the Judicial Council was read by Guy Aud, Chairman, and accepted and filed.

The report of the Executive Committee was read by Dr. Oscar O. Miller, Chairman. Motion that the report be received, approved and filed was put to a vote and carried.

B. W. Smock, Chairman of the Program Committee, gave his report and thanked the members of the Committee for their wholehearted effort and support. The report was received, approved and filed.

The report of the Membership Committee was read by W. W. Nicholson and will be received and filed.

The report of the Library Committee was read by F. G. Speidel and will be received and filed.

The report of the Certified Milk Commission was read by Gordon S. Buttorff and will be received and filed.

The report of the Public Relations Committee was read by W. I. Hume and will be received and filed.

Virgil Simpson read the report of the Medical Economics Committee and, with regard to Margaret Limper's suggestion concerning a tax to be paid for those members of the Society now in the armed forces, the Committee recommended that the plan now in effect remain until the war is over.

With regard to industrial health, Dr. Simpson said an "Industrial Board of Hygiene" was created by the State Board of Health. In consideration of the board's activities, the Committee felt that the term, "Bureau of Industrial Health" would be more appropriate. He made a motion that this change be made. Motion seconded by A. T. McCormack and carried.

Reports of the Profession Service Committee read and accepted were: Physicians' Exchange, by Lytle Atherton; Credit and Rating, C. S. Eddleman; and Nurses' Registry, read by M. F. Beard for Esther Wallner.

The report of the Necrology Committee was read by M. F. Beard for R. I. Kerr and the members stood in silent tribute.

The report of the City Public Health Committee was read by Norvin Casper.

The report of the Public Health Nursing Association Advisory Committee was read by M. F. Beard.

The report of the Dental Relations Committee was given by A. W. Mickell, Chairman.

The report of the Druggists' Relations Committee was not read; also, the report of the Woman's Auxiliary Committee and the Tuberculosis Case Finding Program.

The President then announced the results of the elections, as follows: President-elect; Harry M. Weeter, who was escorted to the Speaker's table.

1st Vice-President, G. L. Dyer; 2nd Vice-President, W. W. Nicholson; Secretary, Herman Mahaffey; Treasurer, P. W. Urton.

Judicial Council: Dougal M. Dollar, D. Y. Keith.

Delegates to the State Medical Association for two years are: C. A. Boone, Gordon S. Buttorff, W. C. Gettelfinger, J. W. Heim, James S. Lutz, M. H. Pulskamp, Frank A. Simon, Karl D. Winter, Austin Bloch, J. S. Bumgardner, B. M. Goldsborough, Orville R. Miller.

Alternate Delegates for one year term are as follows: Spafford Ackerly, Harry S. Frazier, H. Arch Herzer, Richard T. Hudson, O. H. Kelsall, A. M. Leigh, Lamar W. Neblett, L. Lyne Smith, B. L. Woodward, Will Allen, M. C. Baker, C. W. Dowden, Jr., Hays Gailbreath, R. R. Cornert, Philip E. Kirk, A. M. McKeithen, Kenneth C. Reising, James E. Winter.

A. T. McCormack moved the Society extend its thanks to the retiring President. Seconded and carried with rising vote of thanks.

Meeting adjourned at 10:25 P. M.

Herman Mahaffey, Secretary

Jefferson: The 859th stated meeting of the Jefferson County Medical Society was held Monday evening, February 15, with 33 mem-

bers and guests present. As there were only 18 present at 8:20 P. M., the President suggested beginning with the scientific program, which was done.

The motion picture, "Nicotinic Acid Deficiency," was shown.

Dr. C. Wm. Dowden, Jr. then read his paper on the "Vitamin B. Complex" which was followed by Dr. E. E. Landis' paper on the "Use of Vitamin B. Complex in Neuropsychiatry."

Discussions by Doctors Ben H. Hollis and Frank Stites were followed by closing remarks by Doctors Dowden and Landis.

After the conclusion of the Scientific Program at 9:45, the Business Meeting was next in order.

The Secretary read the minutes of the previous meeting and they were approved as read.

Harry M. Weeter, Chairman of the Program Committee, spoke of the difficulty to get members of the Society to appear on the programs. Unless those asked to appear make an effort to accommodate the Society either by giving a case report or essay, there are only two or three things to be done: (1) Reduce the number of meetings which is always the death notice of the Society; (2) Dispense with meetings; (3) Switch to moving pictures. Dr. Weeter dislikes the latter and would rather see the program kept in the hands of the members of the Society. There ought to be enough material to make good papers. The problem is up to the members of the Society.

The President announced that the Library had been designated as the Regional Medical Library for Military centers in this region and Miss Walker asks that all books, journals and pamphlets not wanted any more by the members be contributed to the Library to help supply the demands made for its services by these military personnel.

Herman Mahaffey, Secretary

Rockcastle: The regular monthly meeting of the Rockcastle County Medical Society was called to order by the President, Lee Chesnut, February 5th at 7:15 P. M. Selective Service office, Mt. Vernon. Minutes of last meeting read and approved.

R. G. Webb read a paper on Hypertension, discussion followed by Lee Chesnut, Nevil M. Garrett and T. A. Griffith. All had some valuable points to add to the paper.

In closing the discussion on his paper Dr. Webb again reaffirmed his conviction that hypertension was not due to old age, but due to some kidney disease or enzyme and that it began in middle life.

The secretary called attention to the report of the Oneida Maternity Hospital in last months Journal and suggested that our society visit Oneida in the near future, get all the facts and see if we can't do the same thing for our county which, due to the war, is badly in need of the same kind of service.

R. G. Webb, Secretary

Shelby: The regular monthly meeting of the Shelby County Medical Society met January 28th at the Colonial Inn with T. J. McMurry as host. The following members were present, Drs. Bell, Dowden, Richeson, Hughes, Skaggs, Smith, Allen, Nash, McMunn, Weakley, Bland, Alexander, Hayes, Sternberg, Buckner, Sleadd, Risk and Mr. Afungberg and Mr. Melton of the John Wyeth and Company.

After a delightful turkey dinner that was furnished by the host the meeting was called to order by the president, Dr. Bell.

The minutes of the previous meeting were read and approved.

The secretary read a letter from Dr. L. H. South stating Dr. Pelouze of Philadelphia would be in Kentucky during the month of May and would like to appear before the Society. The Secretary was instructed to invite Dr. Pelouze for the May meeting.

Miss Holmes, the superintendent of the local hospital, invites the society to meet at the hospital for the March meeting. This invitation was accepted.

The host of the evening, T. J. McMurry, being absent on account of illness, the president introduced Mr. Afungberg and Mr. Melton of the John Wyeth Company, who then showed a motion talking picture on "Peptic Ulcer." This picture was very interesting and was discussed by many present.

A motion was made to adjourn. The next meeting being February 25th when W. H. Nash will entertain.

C. C. Risk, Secretary

IN MEMORIAM

J. C. Hoover, Owensboro

In the passing of Dr. J. C. Hoover the medical profession has lost a loyal member, a distinguished physician and surgeon, the community an outstanding citizen, a faithful friend and a devoted servant. Born in the rural section of Ohio County where he grew to manhood he was blessed by the opportunity of deriving many valuable lessons from nature: The song of the birds, the rippling brook, the jingle of the old cow bell, the lambs gamboling on the hillside and the golden glow of the setting sun showered their blessings and no doubt were a great inspiration to him. It may be said of him, in youth he lived near nature's heart; as plow boy turned up the sod, loved flowers, birds, brooks and hills, "and looked through nature

up to God." His literary training consisted of the great lessons taught by a devout christian Mother and Father and he learned these lessons at his Mother's knee: "That love at which his Mother's knee he learned, and did forever keep a precious treasure in his heart of Now I lay me down to sleep."

His early schooling consisted of the well directed training at the public school in the community of his birth. After completing the public school he attended a commercial school at Evansville, after which he entered Rush Medical College and graduated at the age of twenty-one; quite an accomplishment for a country boy without an endowment fund. After his graduation he located near his birth place and home at the small village of Beda, where he practiced for four or five years and then moved to Pleasant Ridge where he remained until he felt that his talents could be more abundantly used in Owensboro to which place he moved in 1894. At Beda and Pleasant Ridge he left a host of warm and admiring friends by reason of his close application to his work and devotion to his profession. On locating in Owensboro he called to act every faculty at his command and dedicated the best to the people whom he served. In his social life Dr. Hoover was an outstanding character. Never indulging in petty controversies he held himself aloof from common gossip. He despised flippant jesting and was never heard to flatter a friend or abuse an enemy. He conducted himself in such a way that we only thought of him as our physician and friend. His very demeanor bespoke his high calling and graced his chosen profession with honor. Such a one we may well afford to emulate.

NEWS ITEMS

Dr. Frank M. Stites, age 74, died at his home in Hopkinsville, January 26th. He was graduated from University of Louisville and began practice in Hopkinsville in 1889. He is survived by three physicians, Dr. F. M. Stites, Jr., Louisville; Lieutenant Commander James R. Stites, and Major John Stites.

John F. Busch, M. D. has been appointed Director of Medical and Health Service for the Eastern Area of the American Red Cross, with headquarters in Alexandria, Virginia, which includes Kentucky in this area. It is important to remember this name and address at any time there is any medical relationship with the Red Cross in your county.

A. A. Baxter, 76, of Brandenburg, who for 54 years was a practicing physician in Meade County, died in February at SS. Mary and Elizabeth Hospital.

BOOK REVIEWS

RABIES: By Leslie T. Webster, M. D., member of the Division of Pathology and Bacteriology of the Rockefeller Institute for Medical Research. The MacMillan Company, Publishers, 60 Fifth Ave., New York. Price $1.75.

The author has presented a long needed survey of available literature on the diagnosis and prevention of rabies, including a detailed report of the Institute's mouse test for diagnosis and for evaluating rabies vaccines, which are two of the most significant contributions to the study of rabies since the beginning of the century. This book is indispensable to those engaged in rabies research, doctors and veterinarians and public health administrators. Dog owners will find in it a sympathetic and illuminating discussion of their responsibilities in the control of this disease.

TREATMENT IN GENERAL PRACTICE: by Harry Beckman, M. D., Professor of Pharmacology, Marquette University School of Medicine, Milwaukee, Wisconsin. Fourth Edition, Thoroughly Revised. 1015 pages. Philadelphia and London: W. B. Saunders Company, 1942. Price $10.00.

The new fourth edition is considered one of the best of this widely used book. The entire volume has been rewritten adding nearly 50 diseases not previously discussed, including many new treatments and prescriptions.

In this edition are found new chapters on vitamins, the use of sulfonamide drugs, also a helpful chapter on the treatment of diseases of the aged. Tropical diseases also receive due attention.

THE MIND AND ITS DISORDERS: By James N. Brawner, M. D., Medical Superintendent, Brawner's Sanitarium, Smyrna, Ga. Walter W. Brown Publishing Co., Publishers, Atlanta, Ga. Price $3.50.

This book, when considered as a whole, promulgates the view that psychiatry is closely related to internal medicine, that is, that somatic diseases including toxic states and chemical imbalances which affect the functioning of the higher cerebral mechanisms are the main etiological factors. The contents are divided into the following:

Part I is devoted to brief description of mental reactions as related to cerebral function.

Part II is devoted to the etiology, symptomatology and treatment of the psychosis.

Part III gives a brief description of the neurosis and psychoneurosis.

Part IV refers to a description of all related subjects.

The subjects are described briefly in such a manner the general practitioner can understand.

MILITARY MEDICAL MANUALS—Manual of Dermatology: Issued under the Auspices of the Committee on Medicine of the Division of Medical Sciences of the National Research Council by Donald M. Pillsbury, M. D.; Marion B. Sulzberger, M. D.; Clarence S. Livingood, M. D. 421 pages with 109 illustrations. Philadelphia and London. W. B. Saunders Company, 1942. Price $2.00.

The diseases of the skin are of greater importance in military service than in civil life because of the considerable loss of the effective manpower and partial incapacity of a material number of personnel of many commands. As most of the text books on Dermatology are very bulky, this manual has been prepared by the Division of Medical Science National Research Council with the intention that it should provide a compend of principles of diagnosis and treatment of the more common skin diseases. It should be a valuable book for the general practitioner.

NEPHRITIS by Leopold Lichtwitz, M. D., Chief of Medical Division of the Montifiore Hospital, Clinical Professor of Medicine, Columbia University. The full extent of the knowledge of our time about the pathology, diagnosis, treatment and prognosis of Renal Diseases. 14 chapters, 344 pages, 120 illustrations and tables, bibliography, Index. Grune and Stratton, Inc., publishers, 443 Fourth Ave., New York. Price $5.50.

This is a comprehensive and concise book on one of the most important problems in daily practice. The complicated clinical pictures of Nephritis are constantly encountered by the general practitioner and the internist, and the understanding and treatment of kidney disease is equally necessary for the surgeon, obstetrician, otolaryngologist, ophthalmologist, neurologist and urologist because of the intimate relationship between the chief excretory organ and pathological conditions anywhere in the body.

The subject is treated in a practical manner, as the aim has been to give the physician a handy, useful book. Free of complicated textbook ballast, it clarifies the physiological and pathological basis of Nephritis. It interprets and evaluates the multitude of laboratory tests, which have become more and complicated. The author outlines a simple method by which the renal excretory capacity can be determined so that an individual diet can take the place of routine limitation of food intake.

It acts as a complete and definite guide to a safe diagnosis.

It leads the way to a sound and experienced management of the patients in a group of diseases which require the daily supervision of the sick, often through long periods of their lives.

HEALTH EDUCATION OF THE PUBLIC by W. W. Bauer, B. S., M. D., Director Bureau of Health Education, American Medical Association, Associate Editor of Hygiene, the Health Magazine and Thomas G. Hull, Ph. D., Director Scientific Exhibits, American Medical Association with a foreword by Morris Fishbein, M. D., Editor of the Journal of the American Medical Association. Second Edition, revised and illustrated. W. B. Saunders Company, Publishers, Philadelphia. Price $2.75.

The authors have written a factual handbook for all workers in the field that will prove particularly helpful in organizing and conducting the many branches of an effective health education program. It is a clear and practical description of those methods, and the means of carrying them out, that are being used today.

For the Second Edition, the authors have brought their book completely up-to-date. There are new chapters on A Philosophy of Health Education, and on Training and Qualifications. The chapters on health meetings, motion pictures, exhibits, health museums, and the newspaper have been fully revised. A valuable new feature is the study of words habitually used by doctors in writing for the public. In line with the many improvements in the text proper, the physical appearance of the book itself has been greatly improved for this edition.

STANDARD NOMENCLATURE OF DISEASE AND STANDARD NOMENCLATURE OF OPERATIONS: Edited by Edwin B. Jordan, M. D. Published by the American Medical Association, 535 N. Dearborn St., Chicago.

The purpose of the system of classifying disease employed in this book is to present a logical clinical nomenclature. This work was initiated by invitation of the New York Academy of Medicine in 1928 and at that time the National Conference was formed with a membership representing most of the leading medical and public health organizations in the country. Since that time the work on Nomenclature has been done under the direction of the editor and an editorial advisory board.

This book aims to include every disease which is clinically recognizable and to avoid repetition and overlapping, it attempts to make clear the distinction between a disease and its manifestations. It has been designed primarily for clinicians.



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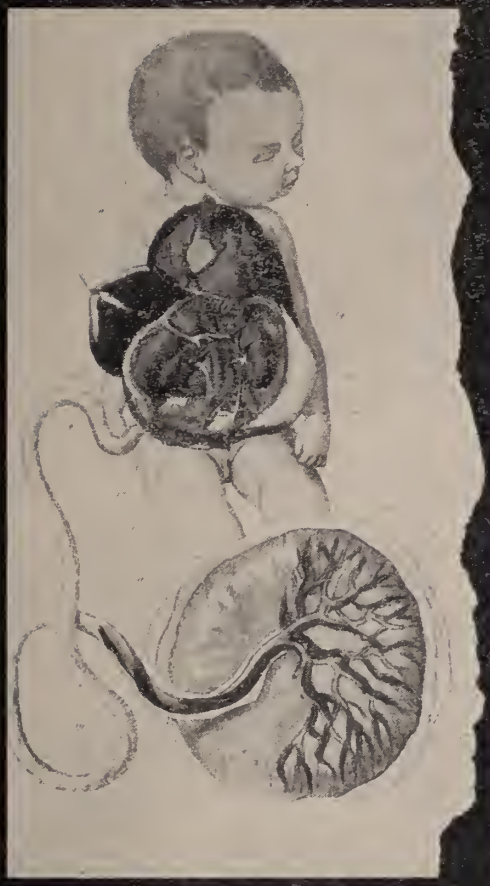
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N. Y. State Journ. Med., Vol. 35, 6-1-35, No. 11, 590-592.



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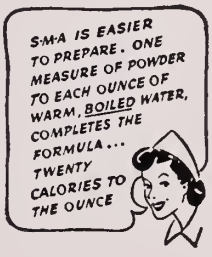
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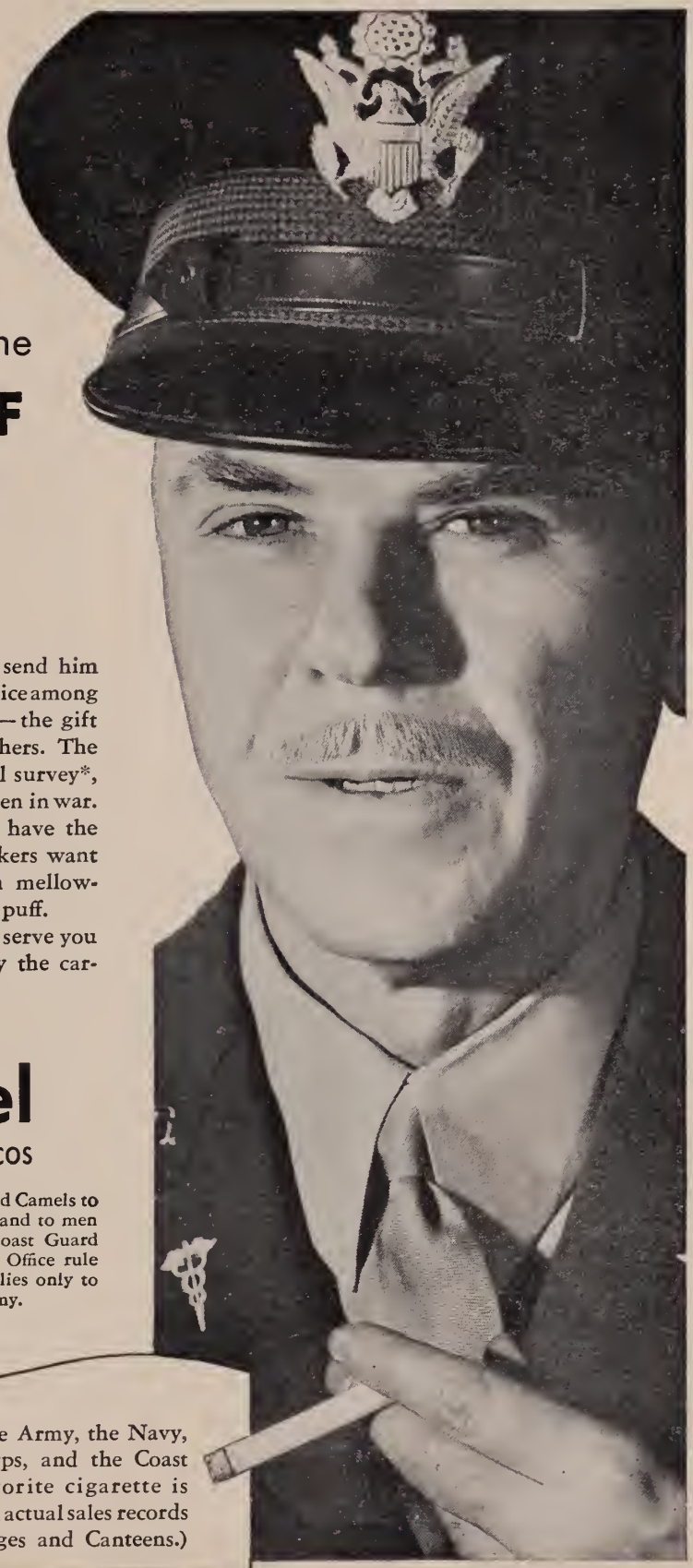
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Ballard	F. H. Russell	Wickliffe	
Barren	C. R. Markwood	Glasgow	April 21
Bath	H. S. Gilmore	Owingsville	April 12
Bell	Edward S. Wilson	Pineville	April 9
Boone	R. E. Ryle	Walton	April 21
Bourbon	George M. Jewell	Paris	April 15
Boyd	R. G. Culley	Ashland	April 6
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Clay	L. H. Wagers	Manchester	April 13
Clinton	S. F. Stephenson	Albany	April 17
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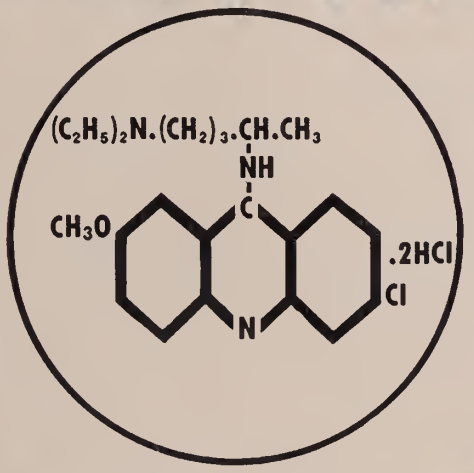
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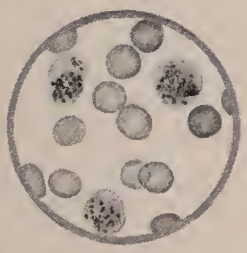
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"You believe in prescribing plain cow's milk modified. Haven't you found out that S-M-A* will save you a lot of unnecessary questions? Cut out a lot of bothersome arithmetic?



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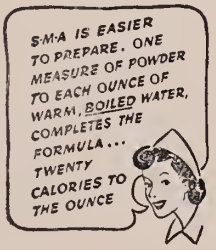
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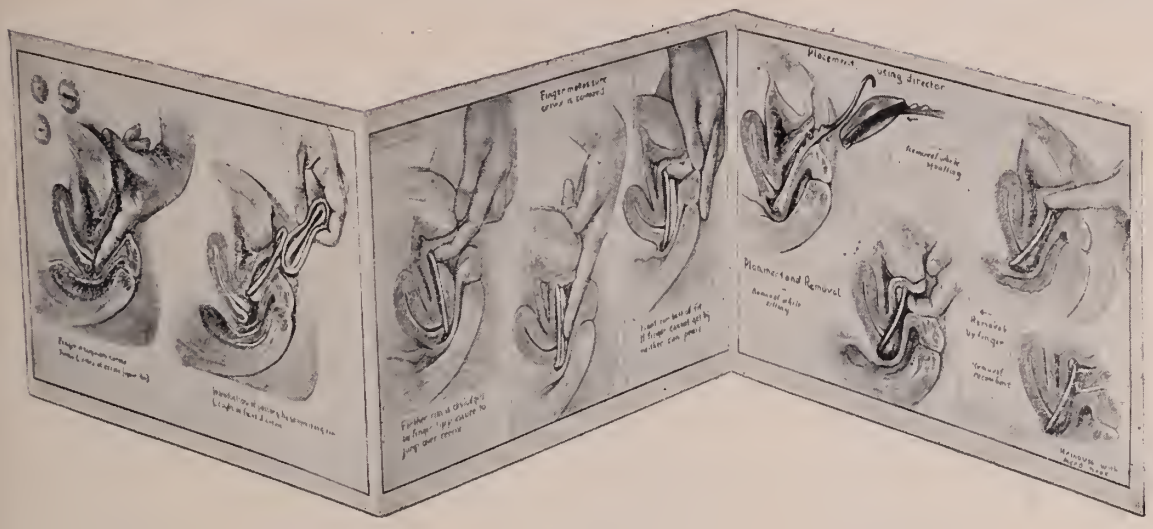
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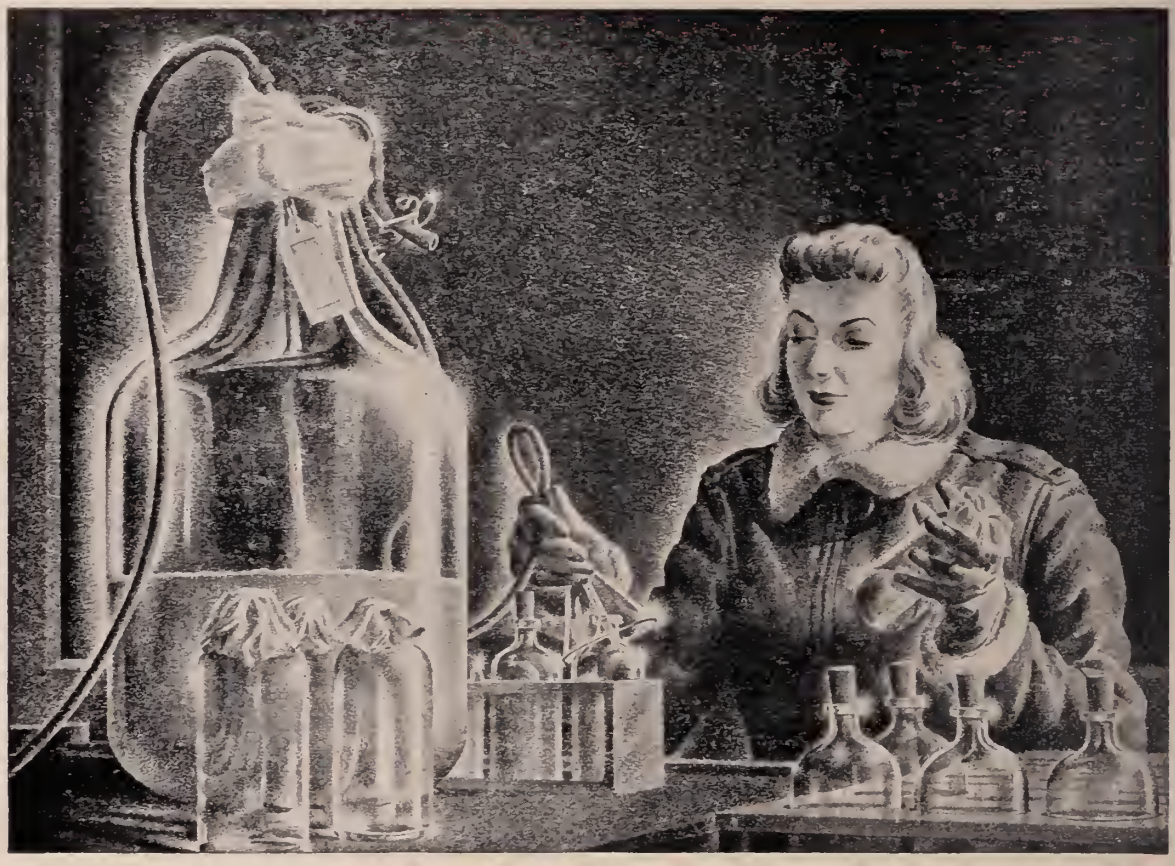
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KENTUCKY MEDICAL JOURNAL

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

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1943 WAR SESSION

At a meeting of the Council of the Kentucky State Medical Association held in its offices in Louisville on February 13th, it was determined to hold a War Session at the Brown Hotel in Louisville Monday, Tuesday and Wednesday, October 4, 5 and 6, 1943. This matter had been under consideration for a month and the members of the Council were unanimous in reporting that the physicians of the State felt that this meeting should be held and that it should be devoted largely to as nearly adequate medical care as is possible for the civilian population of the State.

Dr. O. O. Miller of Louisville, one of the Vice Presidents, was selected as Chairman of the Committee on Scientific Work and authorized to select the other member, the Secretary being, ex-officio, the third member. Dr. Miller will be very happy to receive suggestions in regard to the program.

Monday, the first day of the Session, will be devoted to the House of Delegates, which will meet at 10:00 A. M. Scientific Sessions will be held Tuesday and Wednesday and the election of officers will come at 2:00 P. M. on Tuesday afternoon, except that the vacancy in the position of President-Elect occasioned by the death of Dr. C. C. Turner will be the first order of business after the organization of the House of Delegates on Monday.

After thorough discussion, the Council decided that there is but one form of membership permitted under the Constitution and By Laws. Each County Society is the judge of its own members and only those members who are reported and for whom the State assessment of $5.00 is paid can be considered as in good standing. It was recalled that this was the procedure during World War I and during the Spanish American War. Many of the County Societies are paying the dues for their members absent in the armed services. Many of the men in the armed services are sending in their own dues because they do not want to have the continuity of their membership interrupted.

The Council expressed the deep sense of the loss of the profession of the Commonwealth caused by the death of our beloved President-Elect, Dr. Caswell C. Turner, of Glasgow. Dr. Turner has been almost since his graduation a member of the House of Delegates or of the Council, has served on many of its important committees and his leadership has profoundly affected the profession of medicine in the State. The Chairman and Secretary were instructed to communicate the sympathy of the profession to Mrs. Turner and to the Barren County Medical Society.

After an extended discussion of the distribution of physicians in the State the Committee on Medical Economics was requested to make a study and report of this important subject and the Committee on Medical Education was instructed to review the requirements and curricula of our medical schools with a view of returning them to their proper field of training physicians for general practice during their undergraduate courses.

Those present were Drs. E. M. Howard of Harlan, President; C. A. Vance of Lexington, Chairman; Drs. V. A. Stilley, Benton; D. M. Griffith, Owensboro; C. C. Howard, Glasgow; J. I. Greenwell, New Haven; W. B. Atkinson, Campbellsville; J. M. Blades, Butler; J. Proctor Sparks, Ashland; H. K. Buttermore, Liggett; J. B. Lukins, Louisville and the Secretary, Dr. A. T. McCormack, Louisville.

PAY YOUR DUES

This is the last number of the JOURNAL which you will receive if you have neglected to pay your dues by the end of the current month.

The postal authorities require deletion from the subscription list of the names of all physicians whose dues are delinquent on April First.

It should also be remembered that the Constitution and By-Laws of the Association provide that only members in good standing as of this date are entitled to the Medico-Legal services of the Association in case of need.

Because of the many problems confronting the medical profession as a result of war, the JOURNAL and membership in the state organizations mean more to the profession today than ever before in its history. The forthcoming issues of the JOURNAL will carry discussions of some phases of these many problems, together with news of the program for the next annual meeting which will be held in Louisville, October 5th, 6th, and 7th, with headquarters at the Brown Hotel.

See your secretary immediately and continue, by paying your dues now, the support you have always given to organized medicine.

LAST OF THE MOHICANS

Dr. J. W. Conklin of Leitchfield, graduated at the Hospital College of Medicine in the Class of 1882. He is the last of the thirty-four members of this class. Dr. D. G. Murrell, Paducah, of the Class of 1881, was the last member of that Class. So far as we know, the late Dr. Dabney of Louisville, who graduated in 1883, was the last member of his Class. Dr. Conklin writes that every member of the Faculty of the College when he was there has passed on.

He has missed only five or six days from his office this winter, and these only because the pavements were too slippery. He has reached the age of 84 in a life full of usefullness and ripened by a fine experience. He is the only physician in Grayson County who lived to be more than 80 years of age. A personal letter from Dr. Conklin was written without glasses.

It is a pleasure to record a tribute to one of the really very great physicians of our Commonwealth who has served others for so long a time.

AN INTERESTING REQUEST

Few contributors to the Journal fully realize how widely their articles are read. Dr. R. G. Webb of Livingston contributed to the June 1942 Journal an article on Tularemia, requests for copies of which have been received from as far away as London, England.

Again, an article on the Prevention of Hemolysis, appearing in the Journal a few months ago, has attracted attention as far away as India and South Africa and Russia. With Kentucky doctors serving in the armed forces throughout the world, more and more requests for copies of the Journal from foreign countries may be reasonably expected.

ORIGINAL ARTICLES

A NICE LETTER FROM THE FRONT

The following newsy letter has been received from Doctor A. W. Bradford, formerly an intern at the Louisville General Hospital and a Resident of St. Joseph's and a practitioner in Harlan County:

French Morocco
Region of (Censored)
North Africa
December (Censored) 1942

Dear Folks: Well here I am in North Africa. Little did I realize I would be here even in a lifetime. I was very much surprised to know that Africa is inhabited by anything other than cannibals, pigmies, lions and tigers. Well, it is much different than that. The cities are ultra-modern. The shops are all modernistic, the streets compare favorably with our boulevards and are lined with beautiful palm trees. The homes here are like the ones you would find in the Country Club district of Kansas City, even more beautiful. The architecture is distinctly Spanish in style. Every home has a white wall around it, which is covered by a beautiful blue flower. The natives are French and Arabs. I am amused at their dress—the men wear long white bloomer pants, no socks and a pair of what looks like our slip-in bedroom shoes—only pointed at the end. How they keep them on is more than I can figure out. Their cap is a red basket-like looking affair. It must be the style to have lots of patches, because they certainly have patch upon patch. The women wear long white robes with a shawl over their head and a veil over their face. It is considered a very bad breach of dress if they go without their veil. They have a straight blue line in the middle of their forehead down to their nose. This means they are of marrying age, otherwords, candidates for marriage. They do a lot of marrying, too, from the amount of reproduction here. (Censored)

The public toilets here amuse me. They are built on the sidewalks. You simply step in when you want to use them, and the passerbys can see your head and shoulders, feet and legs. It is not uncommon to see a man standing there going about his business and at the same time tipping his hat to the ladies.

The transportation is a big problem since the Germans took all their autos, tires, and gasoline. All taxis are horse-drawn. I rode in several and it takes me back to the days when I use to drive a

horse and buggy to school. We always got to our destination and had no filling stations or blowouts to worry about. My mode of transportation is a bicycle I purchased through the government for official use.

As to recreation they have many things to do, horse racing, bicycle racing, swimming, hunting, basketball, soccer ball, tennis, and the daily trip to the bar. All of these I have witnessed or participated in. I think I'll have to give up my baseball as I had a little accident and have the scar to show for it which was a result of my participation. I was attempting a hook slide into home as I use to do when playing for dear old Baker. I completely forgot I was dressed in shorts. I guess enough said about that. At any rate, I had to have six stitches taken. I won't say where and was definitely a casualty of World War No. 2.

The climate here is wonderful. I would say it compares very well with Florida. The sun shines nearly every day, and it rains nearly every day. The temperature ranges from 40 to 70°, never warmer than 80°. The humidity is quite bad. When it gets 70° you know its hot and you immediately recognize it when you look around and see everyone perspiring.

The principal industries here are as follows:

1. Agriculture: They produce a great variety of vegetables—such as cauliflower, lettuce, spinach and small grain. Their fruits are mostly of the citrus group, tangerines and oranges. These are delicious. The people here use them as their dessert.

2. Mining: (a) Phosphate (b) manganese (c) coal (d) iron and gold. I suppose they have the largest phosphate deposits in the world.

3. Stock raising: Cattle, hogs, sheep and goats. The Germans just about cleaned up that industry. Their leather goods here are beautiful. I wish you could see some of their leather chairs, purses, saddles, etc.

4. Fishing: Yesterday was the first time they had fresh fish because they had no gasoline for their fishing boats. Now we have remedied that situation. They are quite thankful for it, too. They say our coming in to Morocco was not an invasion but an invitation. The V for victory is a common sight here when we march through the streets.

Now, something about our own living. We lived at first on what we called K rations. These are such things as dry biscuits, canned meats, cheese and chocolate. We existed on these items for about a week. We had a lot of fun rigging up some type of stove to cook on. They ranged all the way from the open bonfire to small gasoline stoves. This has all been remedied now by the installation of field kitchens and mess halls. Our sleeping quarters were everything from a tent to a hotel. Mine was in a schoolhouse—14 of us in one room and blanket on a hard concrete floor for a mattress. We all took it in good spirit as we realized we had a job to do and we are darned certain we can do it. All of this, too, has been remedied now by cots, electric lights, hot and cold showers, laundries, etc. In short, we are quite comfortable. It was quite a picture seeing the boys use a shower I rigged up on top of the school building. I made it out of a tin can, a piece of surgical tubing and half a gasoline drum. Every night we would have a bucket brigade to fill it. After it sits in the sun all day the water is quite warm. For privacy we stretched a put tent around it. The physics of it was based on the syphon and gravity, thanks to Tommy Evans and Professor Deel for teaching me these things in school.

As to our own routine, it consists of daily calisthenics, marches, organized athletics, hospital work, which, by the way, has been very light from a surgical viewpoint, as you can readily understand by reading the newspapers about the campaign in North Africa. The evenings are devoted to bull sessions on everything from philosophy to women, the latter of which is the most popular, as women would be a sight for sore eyes, especially if they were our own sweethearts or wives. We have a good short wave radio which helps us spend many a lonely evening. We listen to Jack Benny, Paul Whiteman, Bob Hope and all the rest. We get the daily news and sports review. All of this we hear direct from the good old U. S. A. My, it gives me a thrill to hear English spoken and a band strike up a good hit tune. We have lots of fun grabbing each other and doing the jitterbug when we hear the Jersey Bounce or some other popular tune. I wish Tommy Evans could get a hook-up with New York on the Baker Birthday party. Another thing I did not mention in the way of recreation is our new officers club. This is a large place similar to some of our more fashionable night clubs. It has a bar where they serve wine, beer, cognac, and rum. None of them interest me but they are there for those

who like them. They have two floors for dancing. The music is furnished by our troop. The girls are furnished by the French. The girls are learning fast. They really go for the jitterbug and rhumba. Most of them are already speaking fair English as they are eager to learn it. One of them gave me a dressing down for not learning French.

I took a bicycle ride to the airport the other day. On my way I saw a farmer plowing with a camel and jackass hooked together as a team. The plow was a crooked stick. He was getting the job done O.K. He consented to my taking his picture. Farther down the road I came on to another group of farmers taking their wares to town. The jackass had a straw saddle over his back. On each side there is a large pouch. On one side he had a sheep, the other side was filled with chickens. His camel had the same type of saddle but his cargo was different. It consisted of vegetables. The wife walked along the side while the husband rode. Most all field work is done by the women and children with the exception of plowing. On down the road a little further I met another Arab carrying a sheep over his shoulder. I took pictures of all these. The price was a cigarette. The most common sight on the road is the Arab's method of transportation which is either a jackass or camel. Those little animals certainly make good time and I imagine the upkeep is nil. They don't use a bridle. All they guide them with is a stick.

The Arab's home is quite interesting. It is built out of mud or stones. It is not over 6 to 8 feet high. No windows are present and it has but one door. The total space it covers is about 225 feet, in other words about 15 x 15. As many as 10 or 12 people live in this one room. No beds are seen. They sleep on a rug or straw on the floor. All cooking is done outside on open fire. Their food consists mainly of nuts, vegetables and some meat, cooked or uncooked, mostly the latter.

They use a candle for light and when they don't have that they use an animal fat that they burn. It is quite an insult to them if you don't take off your shoes when you enter. I took mine off but was sorry I did because what I stepped in is not pleasant. Another breech of etiquette is to enter while the wife is present. She must first leave. If he asks you to dine with him you must be sure to leave something on the plate, this I had no trouble doing. The scraps are for the wife and children. Their villages are called Medinas. These are very picturesque. Narrow streets which are very dirty. The sides of the streets are taken up by merchants who try to sell you everything from a tangerine to a rug. Their hand work is beautiful. I purchased some silver bracelets which were made by one of the natives. Leather goods in the way of brief cases, purses, saddle bags, shoes and other wearing apparel are in abundance. Filth is the thing that hangs in your mind when you leave. It is well worth seeing but not a very safe place to be at night.

I cannot reveal the date of departure but I can say it took (censored) days for the trip. This of course was due to the fact we were zigzagging to dodge subs, and the last 5 days were spent in going in circles, as the harbor was not ready to receive us. I woke up about 2 A. M. one Monday morning and looked out the porthole and realized the dim outlines of New York were past, becoming more distant from me. This was my first proof we were leaving for somewhere, we knew not where. Our destination was not revealed until after 4 days at sea. The convoy was beautiful. I felt a certain amount of security when I looked from the boat deck at the power that escorted us. I am not allowed to tell you how many destroyers, how many battleships, how many cruisers, how many airplane carriers or even how many were in the convoy, but I can say it was large and carried a terrific wallop. The first week out the weather was beautiful and the ocean was almost like a lake. We saw many schools of porpoise. The nights were very black—as blackout is carried out to the letter. We could go out on the decks but there was little to see, in fact, you had to feel your way. This we practiced in case we were torpedoed and our lighting facilities were destroyed. You could see the silhouettes of the boats in the convoy. I was amazed when I looked over the stern of the ship and saw a flickering line of light in the water. At first this to me was phosphorescent fish. But I later was informed that it was a rope dragging through the water. As it contacted the sea weed which is phosphorescent it gives off the equivalent of an electric wire with flickering bulbs on it. This is done purposely to help the ships directly in back of you to follow your course. Too, it prevented collisions. During the day we were kept practicing boat drills, fire drills,

general alerts, etc. These drills were very well executed but they did give you a queer sensation. I had only one scare. About 10 A. M. one beautiful morning while I was sitting on the top boat deck I heard shots in the distance. It came closer and finally I could see tracer bullets. Well I was sure we were being attacked so I immediately scampered for shelter. Just as I hit the door leading in to the boat our own guns turned loose. I knew then I was a casualty. My, when those guns turn loose right over your head you certainly know it is not just a shot gun being fired. After about 5 minutes of it I was informed it was only practice and would be a daily thing. Well, I felt relieved but weak. About the 8th day out we ran into a terrific storm. My, this was something. A group of us were playing poker in one of the staterooms when all of a sudden we were all in a tangle on the floor. No one knew whose money he had. I honestly believe this is the way I came out $6.00 winner, because the way I play poker I know I couldn't get it any other way. We went to dinner that night. We were lucky to get anything to eat. Just as we would reach for the sugar for instance it would start moving and we would have to chase it down the table. A good many of us were upset with all of our dinner in our lap. Their overhead for dishes must be terrific. A good many got seasick but I was one of the lucky ones and after watching those unfortunate ones, I am mighty glad I didn't get sick. Our food was excellent, turkey, duck, chicken, beef, potatoes, cauliflower, soups, bread, butter, fruits, ice cream, peaches, cereals, coffee and tea. Too bad the unfortunate ones had to even as much as see this good food because it always made them just a little sicker. It certainly is a good sight to see when another boat (friendly) passes you. We had the pleasure of seeing this one night. It was a hospital ship, which always runs with its lights on. We sighted land the (censored.) I don't think a single man stayed below. Everyone was on the deck. Even though it was so dim it appeared as a mist on the horizon we were glad to see it. It came closer and closer, finally we could make out buildings. Later we could see the lighthouse and finally the whole city and harbor. It was a beautiful sight. We pulled in about noon on the (censored.) We knew we were in Africa as the sun was very hot. Well, we stayed on the boat that night and got off about noon the next day, we had to march to our bivouac. This was a job when you are carrying about 100 pounds. We had to stop about every 50 yards to rest. Finally I got smart and hailed an Arab. He very easily put the thing on top of his head and walked off like he was carrying a loaf of bread. They carry everything on their head, even go so far as to risk a large basket of eggs. How they do it I'll never figure out. Well, that's all up until now. There are lots of things I would like to tell you about the war over here but because of censorship will be forced to omit. I can say things look pretty good from where I am sitting.

To all who read this I trust you had a Happy Christmas and hope you have a very prosperous New Year. Give my love to all. When I drink a toast Christmas it will be to victory and I hope it is not too far away.

THE TREATMENT OF PULMONARY TUBERCULOSIS AS A DEFENSE MEASURE

Oren A. Beatty, M. D.
Glasgow

The experience gained through World War I has focused attention upon the examination of the Selective Service registrants and others entering the armed forces of the United States for the purpose of eradication of tuberculosis. The importance of the armed forces being free of tuberculosis is paramount but it is no less important for the civil population to be protected now as a defense measure and to be freed of tuberculosis following peace. Disease brings desolation to families and likewise to nations and since tuberculosis is the most important of the chronic disabling diseases during the active period of life we should plan a tuberculosis control program now as we plan for peace. The control program should be an all out program concentrating upon early diagnosis, treatment and isolation.

Although we are one of the wealthiest nations of the world and enjoy the lowest mortality from tuberculosis we probably will not following the present conflict be able to enter upon a sanatorium building program we had envisaged before the war. If we as a nation are not able to have a sanatorium bed for each tuberculous patient, how much less will other nations of the world with less wealth and more tuberculosis be able to have suffi-

Read before the Kentucky State Medical Association, Louisville, September 28-October 1, 1942.

cient sanatorium beds. Greentree recently called attention to the much greater mortality rate from tuberculosis in the Orient and the increasing mortality in the European countries; and states that it would be economically impossible to institutionalize even a small fraction of their tuberculous ill. Since for the duration it will be economically impossible not only to institutionalize all our tuberculous ill but also to staff the institutions with trained personnel, we shall have to find a method of control different to a sanatorium bed for each tuberculosis patient. It is the purpose of this paper to describe a plan for the control of tuberculosis for the duration and which may be followed also at home during peace and be applicable abroad.

Since the ultimate aim in the treatment of all tuberculosis is isolation and eventual eradication this program will concentrate upon finding and isolating tuberculosis. To be effective it will have to apply to all known cases of tuberculosis and on account of the scarcity of beds ambulatory pneumothorax treatment would play the central role in this program and all other features would be built around it. Such a plan would consist of establishing small sanatoria in focal areas of a state so that each sanatorium would serve a group of counties; and in connection with each sanatorium establish a diagnostic clinic and an ambulatory treatment clinic. In those areas where there is no sanatorium available or hospital beds that could be converted to use of the tuberculous a suitable building could be converted to this purpose. In counties or states where it is economically impossible to provide sanatorium or hospital beds during the war emergency the control program may be limited to the diagnostic and ambulatory treatment clinics with isolation of all open cases.

The sanatorium would be used for a selected group of patients who may need more than simple artificial pneumothorax such as patients needing phrenic nerve operations, thorocoplasties, other surgical procedures, bilateral pneumothorax and chest accidents and complications incident to pneumothorax treatment that could not be handled at home or at the clinic. When extra beds are available in the sanatorium they should be used for simple artificial pneumothorax cases for a short period of hospitalization and education. It would be preferable to take patients that would require short periods of hospitalization so that the turnover would be beneficial to the greatest number of patients.

The diagnostic clinic is important not only from a differential diagnostic standpoint but also because it is through this clinic that the disposition of each individual case may be determined. The diagnostic clinic should have close cooperation and collaboration with the health department so that the contacts of all positive cases may be brought in for examination.

Through the ambulatory treatment clinic would be followed the greatest number of the tuberculous cases in the sanatorium area. The minimal cases of tuberculosis would be placed on bed rest at home, also the cases of ambulatory pneumothorax, the simple pleurisies with effusion and the far advanced terminal cases. All these cases should be isolated to the extent necessary for the individual case and where isolation is not observed the health department should have authority of compulsory isolation. The majority of cases would observe voluntary isolation.

To carry on such a program it would be necessary to cooperate with the health department of each county. Necessarily the case finding program would be under the health department and also compulsory isolation where it becomes necessary. A schematic drawing is presented herewith to show the proposed relationship of sanatorium and clinic set-up with the health department. Since the private practitioner is the most important unit in any case-finding or control program, this close relationship with the health department will bring the tuberculosis control program closer to the private practitioner where it belongs.

The set-up of such a program should be under the direction of a specialist trained in the diagnosis and treatment of diseases of the chest and with experience in the ambulatory treatment. It would be preferable if this specialist were trained also in chest surgery and bronchoscopy or else have a surgeon and bronchoscopist easily available.

Such a plan is not new. Tice who has successfully combined the ambulatory pneumothorax treatment of patients with sanatorium care in a large city states that in communities of every size and racial texture, a well organized plan for ambulatory pneumothorax should result in the closure of an appreciable number of open cases and a consequent improvement in

public health. The author about three years ago proposed a similar plan for rural communities in reporting fifty cases of ambulatory pneumothorax and in a later publication called attention to the success of ambulatory bilateral pneumothorax. Greentree recently proposed a plan of tuberculosis control based upon village ambulatory clinics visited about every three weeks by a roentgenoscopist with a chest specialist in charge. He proposed a central state sanatorium where all the surgery would be performed and the personnel for the clinics be trained. He also calls attention to the work of Tice and Hruby in Chicago and Morales and Pastor in Puerto Rico in ambulatory pneumothorax. Garcia recently reporting favorably on the use of ambulatory pneumothorax in Puerto Rico states that of 4,888 positive sputum cases 44% have been converted. He also states that the average yearly cost of treatment of each ambulant case is approximately one fourth the yearly cost of each sanatorium case.

The advantages of such a program are enumerated as follows:

1. It would be much less expensive than having a sanatorium bed for each tuberculous case. A few of those states that have had sufficient sanatorium beds for their tuberculous ill through the natural decline in the mortality rate have experienced empty beds. Not only would the expense of sanatorium treatment be avoided but also the original expense of large sanatoria.

2. Such a plan would place part of the burden of tuberculosis control upon the individual patient and his family.

3. There is a definite advantage to the patient in having him treated at home or near home.

4. Tuberculosis would be found, isolated and treated and thereby preventing the increase of cases during and immediately following the war.

5. Pneumothorax of all the surgical procedures used in the treatment of tuberculosis is more favorably adapted to ambulatory treatment than all the others.

6. Many physicians could receive basic training in the diagnosis and treatment of tuberculosis through these clinics and also in other diseases of the chest.

7. This plan would serve as an example of tuberculosis control during peace time to nations less fortunate in wealth and disease.

Conclusion

In conclusion, during war and peace to come a plan of tuberculosis control based upon the use of ambulatory pneumothorax as the chief weapon of defense against tuberculosis together with rest and isolation offers us the greatest hope against the great white plague. The ambulatory treatment should be carried out through the clinic in connection with the sanatorium or a few hospital beds set aside for selected tuberculous cases. The case finding program may be carried out through the diagnostic clinic which has close cooperation with the health department. A chest specialist with surgical and bronchoscopic training should be in charge of the set-up. Under such a plan many new tuberculous cases would be discovered, all cases placed under close observation and treated and all open cases isolated. This would definitely reduce the spread of the disease and help to defend our country.

DISCUSSION

O. O. Miller: I have watched the career of Dr. Beatty since his graduation, and I have taken a great deal of pleasure in watching this young man develop a program of tuberculosis. He did splendid work in the community and realized early that if one was to control tuberculosis it had to be done by the general practitioner with some knowledge in regard to this disease, and he early undertook ambulatory treatment for pulmonary tuberculosis.

The greatest contribution that has ever been made to the treatment of this disease is artificial pneumothorax; any physician can learn the technique, any physician can give artificial pneumothorax, but it takes a man with some knowledge of the disease to carry it to a successful conclusion and to know the complications that may occur during its course.

Naturally, when you have a patient with this disease and once you start pneumothorax, you must carry him along for four to six years, and in some cases where the disease has been very extensive you may have to carry him in pneumothorax for the rest of his life.

Dr. Beatty has given you a very excellent plan whereby this disease may be controlled. It is an infectious disease, the same as any other, with the exception that it doesn't have any incubation period. Any child exposed today may have it ten or fifteen or twenty years later. Because of the universality of tuberculosis it is not possible to isolate everybody, but a patient can be isolated in his own home, and

with the program that Dr. Beatty has outlined and with the younger men taking an interest in pneumothorax, I am sure that we can push the death rate down in Kentucky to what I call an irreducible minimum. I am not as optimistic as Louis I. Dublin when he says no tuberculosis in 1960. I believe it is always going to be endemic, but at the same time we can reduce that greatly. It has already been pushed from "the captain of the hosts of death" to seventh place in the death rate.

Not only by the program which Dr. Beatty has outlined may these cases be treated, but this offers an opportunity for finding other cases. We say, "If there is one open case in the home there are one or two other cases lurking there."

One of the methods of finding these is the microfilm. With a 35 mm. film you can make a picture of the chest stereoscopically for the cost of one cent. Naturally, wherever you find one case of tuberculosis in a home, everybody in that home must of necessity be x-rayed, and not only that, but their collaterals, their uncles and their aunts. By this means, with an intensive program, you can find in your own county every case of tuberculosis, both latent and active.

In Minnesota they have recently taken on a program where they have accredited counties, counties which have less than ten deaths from tuberculosis in the county. There are a number that have already qualified. Gentlemen, it is a question of dollars and cents and going out and finding the cases, and if we can adopt a program such as Dr. Beatty has outlined we will be one of the fortunate states with a very low death rate from this disease.

G. E. McMunn: We are all aware of the inadequacies for the control of tuberculosis in Kentucky. The work done by individual physicians, the state sanatoria, the State Board of Health and the various county health units has fallen far short in controlling tuberculosis in the state.

I do not believe we will have any thing like an adequate tuberculosis control program until the physicians of the state get behind some definite well planned program.

Captain Beatty has outlined a program, that seems, at present, to be the only logical way out. Capt. Beatty has outlined a plan for tuberculosis control, may I suggest a plan for doing something about it. Have a representative committee of physicians from various parts of the state meet and draft plans for a state wide tuberculosis control program, then present the plans to the House of Delegates, with the final evolution of a tuberculosis control program endorsed by this Association. Then take the necessary steps to secure appropriations to put the program in action.

Capt. W. B. Atkinson, Louisville: I would like to present the plan that has been followed in Taylor County for the last four or five years. There was an organization that came to me one day and said they wanted to do something for the health of our county and suggested they buy an iron lung, and asked how much it would cost. I said, "Well, it would cost several thousand dollars."

"How often would you use it?"

"Probably once in ten or fifteen years in our county."

Well, that was out. They said, "How about an oxygen tent?"

"That probably would cost you a couple of hundred dollars and would be used probably three or four times per winter, and if it is not used it will deteriorate."

Well, that was out. They said, "Is there anything that can be done?"

So I suggested that they go into a tuberculosis program. The American Legion started this thing and, as usual they turned it over to the Auxiliary to do the work. The first thing that was done was to go to the State Board of Health and secure the names of all the people in Taylor County who had died of tuberculosis in the last five years. That was a rather hard job. There were some 150 names secured. Then they went to all of the physicians in the county and secured the names of those who had tuberculosis at the time or had been treated in the last few years for tuberculosis. Then all of the contacts, both black and white, were contacted personally by the members of The American Legion Auxiliary, and all of these people were brought in and were tuberculin tested. All of them with positive tests were urged to be x-rayed. They were x-rayed at $1.25 apiece if they could pay. If they could not pay they were x-rayed for nothing and The American Legion and its Auxiliary paid for the plate.

We then found some ten or fifteen active cases in that survey.

The next year we recontacted all those who had had positive skin tests and doubtful plates. They were re-tested and were again x-rayed on the same basis. The third year we had cleared up most of the old contacts, and then we started on the high school youngsters, and we tested all of the high school youngsters regardless of their contacts, and the same procedure was followed. This last year we have taken all of the teachers and all of the business people. We have probably uncovered about twenty or twenty-five active cases of tuberculosis, and the thing is almost self-perpetuating, because

the Auxiliary has control of the Christmas Seal sales and all of that money is set aside for this purpose. Of course, if you find five cases this year, that means ten years from now you have fifty less cases, and the thing goes up in multiple ratio. This has been done in the absence of a county health unit, and I believe that every physician in the county is 100 per cent behind it. If any of you are afraid that it is going to cut down on the chest pictures you take, I have found in my experience that I have as many the three months after the clinic had been there as I have in the other nine months of the year, so for a real selfish reason it would be wise for you to back it up even if you do not have that humanitarianism that all of us have to a large extent.

Fred W. Caudill, Louisville: The control of tuberculosis depends entirely on stopping the passage of the tubercle bacillus from the sick to the well. Effectively to lessen this traffic, cases must be found early and control measures taken that will prevent them from dispersing their organisms.

I enjoyed Dr. Atkinson's discussion on case finding in Taylor County, but I didn't hear him say a word about what he did with the cases after they were found. I know from experience that talk alone will not prevent the spread of the disease in the crowded cabin homes in which most of the cases of tuberculosis are found in Kentucky. If left alone the infected mother will continue to handle, cook for and cough on her children, thereby surely infecting them. The principal thing that must be done, if we are to go forward in our control program, is to remove that mother from her family circle, so that she cannot continue to infect those in it. Hospitalization and collapse therapy are the only means of accomplishing this isolation.

According to the procedure discussed by Doctor Atkinson, a great many cases of tuberculosis are found in the state each year. The tuberculosis field unit of the State Department of Health X-rays eight to nine thousand suspects each year—people who are tuberculin reactors, as found by the health officers and volunteer groups—three to four percent of whom are found to have active tuberculosis. Most of these newly discovered cases are far advanced, which means that tuberculosis is still being allowed to go entirely too far before it is discovered. After these far advanced cases are found, practically nothing is done to prevent them from continuing to spread their infections because of a paucity of isolation facilities.

I agree with Doctor Beatty that the most practical solution to the problem is that of collapse therapy, but thus far we have been unable to get physicians, located at various points in the state, trained to carry out this procedure.

It is alright to talk about forced isolation of cases in their homes, but it is to be remembered that the important factor of economics works to make impracticable this procedure in the vast majority of communities in the state. Most of the people who have active tuberculosis are relatively poor and are unable to afford the cost of private medical care. They are also unable to afford the cost of the highly nutritious diet which is indicated in the treatment of the disease; again, they cannot afford the loss of the family income, where it is the bread winner that is involved. In other words, home isolation creates an economic problem which most communities in the state do not have the resources to cope with successfully. It looks, then, like this matter of isolation of cases of active tuberculosis resolves itself into a problem largely of state and national proportions. The first need is to provide more beds in which to hospitalize more cases for study and collapse therapy, the second is to provide trained physicians in strategically located communities to whom those who have been returned to their homes may go at stated intervals for refills. To provide these facilities will require the combined efforts of all the doctors of the state. Control of Tuberculosis is, as remarked by Doctor Miller, a matter of dollars and cents. It will cost money but it is worth money and should be done. Certainly now is the time to do it.

At present practically nothing is being done to rehabilitate the boys found through Selective Service examinations who have active tuberculosis. No systematic effort is being made to bring these boys under effective treatment. This should certainly be done.

Tuberculosis still is high in the list of causes of death in the state and is first on the list of diseases causing death in the active period of life. There is a way effectively to handle this problem, but it will require the cooperation of every physician in the state. In this cooperative effort one of the first things that practicing physicians could do would be more completely to report these cases which they diagnose in order that a more accurate picture of the tuberculosis problem may be obtained. In reporting, the point has not yet been reached whether the number of annually reported cases exceeds the number of annually reported deaths. This suggests poor tuberculosis effort. Practicing physicians are continually crying for more facilities for handling cases, yet do not take the time to provide the picture of the widespread prevalence of the disease by reporting their cases. If the essential information of where and in

whom a disease exists is not available, little can be done to effect its control.

Then it would seem that the first thing in importance in the control of tuberculosis would be to continue to find the cases and, next, to report the cases more completely so that a picture of its prevalence would be at hand; little good will be done by finding the cases if facilities for isolation and treatment are not afforded, so that many can be saved and most of them prevented from spreading their infections. For this purpose provision of more hospital beds and wider use of pneumothorax are in order.

W. Clark Bailey, Harlan: I was so greatly impressed by the statistics that more people died in this State from tuberculosis during the eighteen months of the World War than were killed in action. I think that is rather astounding, and yet we do so little about it.

Two years ago, the Medical Economics Committee of this Association considered this question for presentation to the House of Delegates, a plan whereby sufficient beds and hospitalization would be asked from the State of Kentucky. Last year they submitted that plan to the House of Delegates, who approved it, and last fall the Medical Economics Committee appeared before the Judiciary Committee at Frankfort and asked for 600 beds for hospitalization. Due to the war, that plan was stopped, but it was started under the leadership of the medical profession, under the direction of this Association. I think as soon as the war is over we should take that up again and carry it on to the point where we can hospitalize and take care of our tuberculosis.

L. E. Smith, Louisville: I want to speak on two points. One is that Dr. Caudill said that it is a state problem. It is bigger than a state problem. I have on my desk now more than a dozen letters from people who have come in from outside states. All of us who deal with the work here in Louisville know that Jefferson County is loaded from time to time with people who belong far away. They have no state's rights here, but they are citizens of our country and they are a part of the great machine that is trying to protect our country now, so it is bigger than a state problem; it is a national problem, and we will never solve it until we solve it on that basis.

Why don't we do something about it? There are a few here and there who are conscious of the magnitude of the tuberculosis problem. They are startled to remember that in a certain number of months, about ten months in England, there were about 36,000 people killed by the bombs of the Axis Powers, but in that same period of time, 50,000 people died of tuberculosis in the United States, and very few of us said anything about it and very few of us stopped to think about it.

We have ways in which we can solve this problem, or at least make a stab at it and go forward, but we are not doing it; we are just playing about it. I think the element that enters in there is fear. That keeps us from doing something about it. The private physician is afraid to do anything because if he assumes the responsibility of pneumothorax he has got something to do. I know the speaker who spoke just before Dr. Caudill has been working along this line regardless. He has thrown fear aside; he has been giving pneumothorax; he has been stopping people from spreading germs around through the State of Kentucky, and that is important. But fear seems to stand in the way of progress in this great movement. We know what to do; we know that with every case that gets a collapse we stop a spreader. We put him out of the spreaders list and permit him to go on without endangering others.

I am writing a letter today to the health officer of Pike County about a patient who has just left a tuberculosis sanatorium in another state and come into Kentucky. He left the sanatorium against medical advice and came into Kentucky spreading an infectious disease without permission or knowledge of the Health Department of Kentucky. He has a positive sputum and is spreading germs by the millions.

I expect to go this week to a mountain county in Kentucky to look after a man who has just left Outwood against medical advice, and who has just been granted a pension of $100 a month. He has a positive sputum and one collapsed lung, and has gone into the mountains of Kentucky to spread disease. We must do something. We must cast fear aside. Let's go forward in this problem and do something about it.

I am reminded of a captain who was drilling his company on the deck of a steamer in mid-ocean. He had the company marching full step ahead toward the stern of the steamer. He had an impediment in his speech, and when he got excited he couldn't command the language. He saw the men marching toward the stern and couldn't give the command to turn about or to halt. The advance guard had gone over the stern into the sea. The sergeant ran up to the captain and said, "Captain, for God's sake say something if it ain't nothing but goodbye."

E. M. Howard, Harlan: I want to say that this year it will be the major objective of this Association and the State Board of Health to do something about the tuberculosis problem.

Dr. McMunn of Eminence, along with the

other gentlemen, said, to my mind, the most constructive thing about this subject. You can't accomplish anything without organization. We expect to undertake to effect an organization in this state composed primarily of you gentlemen, and we believe we can depend upon your support to do something about the tuberculosis problem in the State of Kentucky.

SOME PROBLEMS IN TUBERCULOSIS AS SEEN IN A RURAL PRACTICE

R. T. Routt, M. D.
Sonora

In the President's address before the meeting of the State Medical Association this year, Dr. E. M. Howard pledged himself to work for the control of tuberculosis and venereal diseases, with special emphasis on tuberculosis. The tuberculous patient, like the poor, is always with us and unfortunately their number is far too great. This disease that strikes down more victims than any other disease in the second and third decades of life, the productive period of life, has been ignored and pushed aside far too long in Kentucky. In reviewing the Journal in preparation for this paper, I was surprised to find that there have only been four or five papers on tuberculosis published in the Journal in the past four years, and that all of these papers except one dealt with some specialized aspect of the disease.

The purpose of this paper is to present some of the problems as seen by the country doctor in treating, or rather in observing and advising patients with tuberculosis, since unfortunately, the treatment of advanced cases of tuberculosis in the country is practically nil. This is no reflection on the country doctor, because we do the best we can with the little with which we have to work. But in the end results, our patients either get well or die in almost direct ratio to their innate resistance. They either spread the disease, or they do not spread it, depending directly upon the activity of their disease. Of course, we in general practice are able to treat successfully many of our patients with early lesions, patients who are in homes in which it is possible to give them adequate care. But on the other hand it is a very embarrassing situation to be forced to tell a patient with tuberculosis, who is in need of specialized care, that the only thing he can do is to go to bed, and to get plenty of fresh air, to drink plenty of milk and eat plenty of wholesome food, to use shot bags, and possibly to take cod-liver oil or vitamin concentrate; because Kentucky has made no provision for him to have sanatorium care. That situation arises with all patients who are unable to pay the minimum of $1.85 per day for sanatorium care. With patients who are able and willing to pay the fee, the situation is very little changed, since we usually have to tell them that there "may be" a bed for them in six or eight months, provided they don't die in the meantime. It is a reflection upon the people of Kentucky in general and the medical profession of Kentucky in particular, that a patient has to be sent to Ohio, as one of my patients was about three months ago, in order to get sanatorium care.

In the past few years, the state and county health departments have done excellent work in finding cases, especially early cases, by tuberculin testing and x-ray clinics. They have also done excellent work through the visiting nurses in preventing the spread of the disease. But there is much more to be desired, since they can only advise the patients in methods of protecting others and there is no power by which they can control the patient who does not have intelligence enough, or whose house is inadequate, or who just does not care enough about his fellowman to follow this advice.

Practically all of us in general practice are only able to give our tuberculosis patients general care. We do not have the training, time or equipment to do the special procedures, such as pneumothorax, which might be done in the office. Since the greater percentage of the patients needing this specialized treatment are indigent or semi-indigent, and since there is no provision to care for this type of patient, we are forced to give them the best at our command and to leave the other necessary treatment undone. This situation causes our results to be very unsatisfactory.

I wish to briefly outline a few cases, with which I have come in contact during the past five years. I report these cases, not because of good results gotten or because of anything unusual in their treatment; but rather because they illustrate some of the problems that we have to face, and show some of the unfortunate end results that must inevitably follow such conditions.

Case I: The first case is an 18 years old

Read before the Muldraugh Hill Medical Society.

white male of lower than the average intelligence and education. He came in to see me because of hemoptysis, loss of weight, and general malaise. He gave the history of having had night sweats and a hacking cough for about a year. Upon physical examination, I found that he had all of the physical signs of a far advanced and very active case of pulmonary tuberculosis. His sputum was later reported to be positive. An x-ray was not made, since I do not have an x-ray and he was not financially able to go to have a picture made. This boy lived about seven miles out of town on the worst sort of road, so I advised the usual procedure of treatment and told him to stay in bed. This boy was the oldest of four children. He lived with his mother, an older half-brother and the three younger children in a little two room log cabin in the poorest part of Hardin county. This was the type of home to which I was forced to send him. The next time that I heard from this patient, he was in the Louisville General Hospital. He had stayed in bed at home for about one week, after which time he felt some better, so he went to Louisville to visit an aunt. A few days after reaching Louisville, he had a massive pulmonary hemorrhage and was taken to the hospital and admitted as an emergency patient. After seven or eight weeks on the ward, he was improved, but since he was not a legal resident of Louisville or Jefferson county, he was not eligible for admission to Waverly Hills or for more than emergency treatment at the hospital, so since there was no other place to send him, he was sent home, in spite of the fact that he needed sanatorium care, and in spite of the fact that he was a spreader of the disease. After a few weeks at home, he again became worse. He did not return to me, since he had already found that I did not have much to offer him. Instead, he went to a physician in a neighboring county, who told him that he could cure him with a very strong and very expensive medicine (such medicine to this type of patient by this type of doctor is always expensive.) The medicine was a creosote mixture and the boy managed to get enough money together to get two or three bottles. Of course after a few weeks, he was too weak to be out of bed and was soon moribund. I saw him a few times just before he died.

The sequel of this case is that a brother, two years younger than the patient, died of tuberculosis about one year later, after a very similar course. A baby sister had died in the meantime with acute hemorrhagic nephritis following scarlet fever. This leaves only one of the four children still alive. I will venture to predict that she will die with tuberculosis before she is 21 years old.

This case illustrates very vividly and tragically the need of a state institution for such indigent cases. It also illustrates the rapidity that the disease will wipe out the children in such homes.

Case II: The second case is a colored male about 32 years of age. I first saw him at his home 3 years ago. He lived with an uncle and aunt in a little two room cabin. The other members of the household were three children of the uncle ranging from 6 to 13 years of age; a widower cousin; and three children of this cousin ranging from 4 to 10 years of age. At the time that I first saw him, he had been in bed about 3 weeks, he had a hard productive cough, he was very emaciated and was running a continuous fever. He had all the physical signs of far advanced and active pulmonary tuberculosis. After a short time, he was improved so he too decided to visit, so he went to Louisville to visit an older brother. While in Louisville, he became worse, so he went to Louisville General Hospital clinic, seeking treatment. Of course admission was refused since he was a non-resident. His brother, however, was equal to the occasion, so he took him out on the street and told him to fall in the street and act like he was having a fit—he warned him not to recover from the fit until he was on the ward. The brother called the police who took him back to the hospital where he was admitted. He was a rather witty and likeable negro so he was kept on the ward for about a year. Plans were made to send him to Waverly Hills, but it was learned that he was a non-resident so he was sent back home. Since he returned home, he has been able to do light farm work. During the past 5 or 6 months, he has developed a tuberculous osteomyelitis of a rib. The last time that I saw him, he told me that he was going back to Louisville and have another fit in the street so that he could get back into the hospital. Necessity is the mother of invention, but it is too bad that this man has to use his wits in such a way to get treatment. I have often wondered how many of the other members of this household will die of tuberculosis.

This case also illustrates the need of an institution to care for this indigent patient, not only to treat him, but also to protect his family from him.

Case III: The third case is a white male about 25 years of age. He made his home with his brother and brother's wife. About two years ago, the 18 months old infant of the brother died with tuberculous meningitis. After checking the contacts, it was found that the patient had moderately advanced pulmonary tuberculosis. He was examined at Hazelwood and sanatorium care was advised. Fortunately his brother and sister were able to pay for his care. After about 3 months on the waiting list, he was admitted to Hazelwood. He slowly improved after a long period of bed rest, pneumothorax, and a crushing of the phrenic nerve. During the past few weeks he has become worse and I learned last week that he had died while still in the hospital.

It took the death of the baby with tuberculous meningitis to discover this case and if it had been possible to discover this case earlier, both the patient and the baby might have been saved.

Case IV: The fourth case is a white female, 40 years of age. I first saw her about 3 months ago because of a pulmonary hemorrhage. She gave the history of having been a patient at Hazelwood Sanatorium 7 years ago at which time she had minimal tuberculosis. She was kept at the sanatorium a few months and stayed in bed 6 months after returning home. She was much improved, so she went on about her work. She never went back to Hazelwood to be checked, although she had been advised to return for periodic examinations. She told me that she was "playing pollyanna" and was trying to forget the tuberculosis and hoped that it would forget her. She worked in her husband's country store, where one of her jobs was the buying of cream. After the hemorrhage ceased and she was improved sufficiently, she returned to Hazelwood for examination. Examination revealed that she had a far advanced case with pathology in both lungs and a 4 cm. cavity in the left apex. Sanatorium care was advsied, but she was returned to her home as there was a large waiting list ahead of her. There was no assurance as to how long she would have to wait for admission. Her husband tried to use political pull to get her admitted to Hazelwood, but without results. After a short time she was sent to Mt. Vernon, Ohio, where she was admitted to Avalon Sanatorium. Within the past week she has been returned to Hazelwood.

This patient is a woman of much greater than average intelligence. Her case illustrates the fact that even patients, who should know better, cannot be relied upon to check up on themselves. It illustrates the need of a systematic and compulsory examination of old patients. It also illustrates the inadequacy of our laws concerning food handlers, since she was allowed to handle cream with an active pulmonary tuberculosis. In our examination of food handlers, we examine for gonorrhea and syphilis and ignore tuberculosis in spite of the fact that it is much more likely to be spread by cream than are the venereal diseases. This case further reflects upon Kentucky since she was forced to go to Ohio for treatment.

Case V: The fifth case is a white female, 24 years of age. She has a baby 20 months of age. In her history, she states that she never regained her strength since the birth of her child. About 1 year ago, while in another state, she had an examination, including an x-ray and was told that she had tuberculosis in a severe form. She preferred not to believe her doctor, and did not heed his advice. Three months ago she moved to Hardin county where her husband is a school teacher. For the past 3 months she has been confined to her bed practically all of the time. It was only after she became bed fast that she sent the baby away from home. About 2 months ago, she was first seen by me. Examination revealed her case to be moribund. It was only after my examination that she was convinced that she had tuberculosis. She was taken to a hospital, but after examination she was sent back home to die.

This case illustrates the need of a systematic and compulsory isolation of patients who are known to be infectious. This patient's child was exposed every day of the first 18 months of its life to an open case of tuberculosis.

Case VI: The sixth case is a white female, 55 years of age. She is the mother of two girls in their twenties. For the past 15 years she has had a hacking cough, with frequent attacks of pleurisy and occasional attacks of hemoptysis. She has been under my observation for the past 4 years during which time she has grown slowly but progressively worse. X-ray of her chest shows that her case is far advanced. She will take all the medicine that I prescribe, but she will not stay at home

and she will not rest or eat properly. She is the type of woman who visits all the neighbors, especially where there are young babies. She attends every church and social function in the neighborhood.

This case illustrates the need of compulsory treatment and more especially of compulsory isolation. I can only advise this patient and she does not choose to heed my advice.

These cases as outlined briefly illustrate very vividly and tragically the inadequacy of our facilities for the treatment of patients with tuberculosis. They illustrate also the difficulty that we have in controlling the spread of the disease. I am sure that every physician in Kentucky can recall many such cases that bring out these facts.

Of course the question logically arises: what are we to do about this situation? Naturally the first step is to find the cases and find them in the early stage. More has been done in this than in any other phase of the work, through education, tuberculin testing and the x-ray clinics of the Public Health Department. Possibly the day will come when there will be periodic and universal x-rays. Next we must have some form of compulsory legislation for the isolation and treatment of open cases, such as we have with the venereal diseases. It is also necessary to have coersive legislation to force the patients to be checked at definite and systematic intervals. We must realize that this is a public health problem and must be handled through a public health organization. Of course this is an imposition upon the personal liberty of the patients, but every advance that is worth while imposes upon the personal liberties of a few people. It is also dangerous because it has the outward appearance of state medicine, but the medical profession must make some provision to take care of this condition since this is one of the reasons that socialized medicine threatens. Practically every indigent tuberculosis patient in Kentucky would vote for socialized medicine under these conditions since they know that we have nothing to offer them under the present set up. If we do not meet the need then surely socialized medicine will, regardless of the fact that it will not be for the common good.

The most urgent need for the tuberculous patient is adequate beds for sanatorium care. Central clinics are needed where patients, regardless of their financial status, can get the advantage of special equipment and specially trained personnel in the diagnosis and treatment.

Of course the general practitioner is going to continue to be the keystone in any successful program to control the disease. He must be ever on the alert to suspect the disease and must cooperate to the fullest with any organization that is formed to combat it.

THE UNITED STATES PHARMACOPOEIA AND THE WAR

Virgil E. Simpson, M. D.
Louisville

Even cold statistics become interesting to the medical profession when applied to the drug trade and the effects of war in the direction of needs and shortages. Permit me the liberty of taking a few facts through their paces.

The Federal Government will spend over forty-million dollars for drugs in 1942 in contrast with the sum of twenty-five millions spent in 1941. Exports of medicinal preparations increased 35 per cent in 1941 over those of 1940. No dependable estimate has been found of the amount of drugs in terms of dollars which this country is sending the United Nations on a lease-lend basis. The group of sulfonamids alone will reach an astronomical figure of one million pounds this year and this figure will be increased threefold in 1943. The company producing atabrine has built up a surplus of 45 million tablets and its production will be increased 8 thousand per cent the next twelve months. This is enough to treat three million soldiers with malaria.

The demand for additional facilities for the dessication of blood plasma for the Army and Navy is enormous, and the same story is told of cotton, of gauze and ligatures. During the past four years the drug industry has been buying up reserves of opium and storing them under government lock and key. These stock piles are adequate for a four or five-year supply. We are getting no opium from China now but some is still coming in from Turkey. There is now a three-year supply of quinine stored in this country. This is fortunate when I tell you that 25 per cent of the shipments intended for the United States since Pearl Harbor have been lost at sea. Neither is it now a military secret that we lost over 80 thousand pounds of

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ergot in the same way. Small amounts of this drug are still coming in from Spain and Portugal. You may need to be reminded that over 900 crude vegetable drugs are used in this country in the manufacture of pharmaceutical preparations and that less than 300 of these are produced commercially from our soil. An effort to develop increased supplies of ipecac in South America has been sponsored by the United States and stramonium is now being obtained from Mexico and Central America for the first time in our history. We have been growing digitalis for several years and no scarcity is yet feared.

Fish oils from off the coast of Norway have been cut off. We drew much of our supply from this area, as did also Great Britain, and under the Lease-Lend Act we must not only find a supply adequate for our needs but we must supply much of Britain's need. The dose of Vitamin A has been ordered limited to 5000 units. Notwithstanding our effort to greatly increase the growth of agar on the West Coast, its use has come to be limited to cultural purposes. It is almost a certainty that the pharmaceutical houses will be asked by the Government to limit their activities to the things called essential to the health of our people. Some of the larger drug houses have already announced that their production will be limited to products designed for essential use. The War Production Board has undertaken to assure priorities to make certain that needed medicines shall be available to the medical profession. Already the drug houses have not only restricted their activities to regular lines but a considerable part of their plant facilities and skilled employes are engaged in war work. Shortage of essential substances or ingredients for U. S. P. preparations has become almost a daily announcement. Most of the shortages are the result of a drop in imports but war needs of an expanding Army and Navy and labor conditions have contributed not a little.

One of the apparent difficulties in the drug industry is that the Government's interpretation of what is essential and morale building is continually changing. Admittedly some of this flux is unavoidable, but equally admittedly some is the result of lack of knowledge and inexperience of persons in high places. When gasoline and sugar are muddled one must be optimistic to hope for clarity of vision in the drug industry.

The U. S. P. has had a number of problems laid in its lap as a consequence of war conditions. In some instances it has been the necessity for quick recognition of need for action, as in the case of insulin. It is generally known that insulin was patented by the Insulin Commission of Toronto University and that the right to manufacture it in this country was subject to license by this Commission and the product had to conform to standards set up in the Connaught Laboratory of the University of Toronto. The patent expired December 3, 1941. It was obvious that with the expiration of the Toronto control some standard for control in the U. S. would have to be set up to insure maintenance of a product that would protect the million diabetics now depending on insulin. Logically, the U. S. P. was the proper agency and the monographs for standards for regular insulin and the slowly soluble preparations finally adopted and which became official February 4, 1942 were the result of conferences with the Insulin Commission of Toronto, the Connaught Laboratory, the U. S. Food and Drug Commission, the A.M.A., the licensees for insulin manufacture and representatives of the U. S. P. XII. Legal technicalities were removed by federal legislation as an amendment to the Food, Drug and Cosmetic Act. It is interesting to note that this legislation was passed by the House and Senate and was signed by the President within one week's time—a near record. Three preparations of insulin are now official—Regular Insulin, Crystalline Zinc Insulin and Protamine Zinc Insulin. Three manufacturing biological houses are now manufacturing insulin, Lilly and Company, Sharp and Dohme and E. R. Squibb and Sons.

The conservation of glycerine became a matter of signal importance early in our war activity. The U. S. P. monograph for Syrup of Wild Cherry was a distinct improvement over U. S. P. XI and called for more glycerine. The new monograph stands but the U. S. P. XI formula remains official until further notice. Glycerine may also be omitted from the formula of soft soap.

There were medical reasons for the admission of a 10 per cent Ointment of Mercury instead of a 30 per cent Ointment, and for a 5 per cent Ointment of Ammoniated Mercury instead of a 10 per cent Ointment, but the interim adoption of these changes will save a large amount of mercury.

Oil of Lavender is no longer obtainable. It has been an official ingredient of Liniment of Soft Soap but is now replaced by the American produced Oil of Cedar Leaf. It has also been omitted from Aromatic Spirits of Ammonia. Oil of Almond has also become scarce and has been omitted from both Oil of Rose and Ointment of Rose Water, and Oil of Peach or Apricot kernels authorized as a substitute.

Prior to our entry into the War our supply of fish oil from which Vitamin D was obtained came from Norwegian waters. Germany has made fishing there impractical. Chemists found in 1941 that there was a species of fish called halibut and apparently were surprised to learn that a halibut had a liver and that halibut liver contained an oil and that this oil was a satisfactory source of Vitamins A and D.

Normal Human Serum and Citrated Normal Human Plasma have been admitted as an Interim action because of the War. The production of these preparations, as is known to most of you, is surrounded by such safeguards as being a pooled product, freedom of donors from transmissible diseases, sterility tests, the addition of preservatives and requirements as to storing and distribution. When distributed as a Dried Serum with less than 1 per cent moisture transportation difficulties are reduced to a minimum.

The Anti Malarials: Before the War it was generally recognized that Cinchona and its alkaloids were inadequate in the therapeutic management of the malarial problem. To the Kentucky profession malaria has never been of serious importance, but in common with the physicians of the deep South we have been conscious of the therapeutic inadequacies. Hence in the addition of new faces to the treatment gallery the Revision Committee has not been moved to admit new drugs because of war conditions alone. New drugs were desirable because quinine did not do a thorough job; in certain conditions the plasmodia were not satisfactorily influenced. The experience of the Medical Corps of the Army has been that when quinine is given as a prophylactic it prevents the development of malaria as long as it is given, but as soon as discontinued clinical malaria develops. Quinine acts specifically on the trophozoits, the Schizonts and the merzoits. It does not destroy the sporozoits injected by the transmitting mosquito and has only a limited action on the gametocytes.

Atabrine, now official as Quinicrine Hydrochloride, is effective on the human life cycles of tertian and quartian plasmodia but does not affect the gametocytes of estivo-autumnal plasmodium. It is in its action on the mosquito life cycle forms of all malaria plasmodia that plasmochin becomes important. This drug is now official as Pamaquine Naphthoate. It is not efficient in the treatment of malaria, in fact, it is absolutely unsuitable for the treatment of any malarial infection. Its sole use is in sterilizing the blood of man, thus preventing the transmission of malaria to mosquitoes. Totaquina is a new drug only in the sense that it is a mixture of the alkaloids of cinchona bark. It contains about 10 per cent of quinine, 25 per cent of cinchonidine and cinchonine and quinidine. It is a cheaper product than pure quinine in that it utilizes other alkaloids and was primarily favored for admission for economic reasons applicable to the Latins of Cuba and South America. After we entered the War it became important to us as well and was declared official by Interim declaration.

Adhesive Plaster: The formula for Adhesive Plaster in U. S. A. XI consisted of a mixture of rubber, resins, waxes, an absorbent powder, either zinc oxide, orris root or starch, mechanically mixed and spread evenly on cotton cloth. The Nipponese having made it difficult to procure rubber, have by the same token made it easy for a revision of the U. S. P. XI monograph so that it will read in the U. S. P. XII "sterile Adhesive Plaster consists of a mixture with pressure-sensitive properties spread evenly upon fabric, the back of which may be coated with a water-repellant film." Rubber is really no longer an essential ingredient in a satisfactory plaster, even where it is available. Knowledge of synthetic resins has increased to such an extent that a satisfactory adhesive mass can be made without rubber. These resins are protein free and hence should be free from allergic reactions sometimes noted from adhesive containing rubber.

Ether: The monograph of Ether has been changed as respects packaging and its use for anesthesia after opening. The new monograph in that paragraph headed "Caution" will read: "Ether to be used for anesthetic must be preserved only in tight containers of not more than 3 kilos (5 pints) capacity and is not to be used for anesthesia if it has been removed from the original container longer than 24

hours." By permitting the use of the larger container it will reduce the cost of ether for hospital use. Another preparation of ether has been admitted for commercial uses. It is called Solvent Ether, the technical title being Ethyl Oxid. It is not to be used as an anesthetic.

With the Revision Committee as now functioning Supplements can be issued each year, thus implementing the Pharmacopoeia to meet promptly all war needs.

CIRRHOSIS OF THE LIVER

W. C. Gettelfinger, M. D.
Louisville

Hepatitis is best classified as acute, subacute and chronic. Acute hepatitis as seen in acute yellow atrophy and infectious or catarrhal jaundice may prove fatal or complete recovery may occur. After an initial stage it may become subacute or latent, progressing slowly below the threshold of clinical symptoms, perhaps for years, with termination in cirrhosis. Subacute hepatitis is more or less a latent phase. The initial stage of chronic hepatitis or cirrhosis of the liver may often be entirely subclinical. This classification is similar to that most frequently used for nephritis and if we think of chronic nephritis as a chronic progressive disease of unknown etiology so also we can consider chronic hepatitis or cirrhosis of the liver a chronic progressive disease often of unknown etiology.

There are various types of cirrhosis of the liver and many different classifications have been used. By far the most common type is portal cirrhosis comprising about 60 to 80%. Biliary cirrhosis is subdivided into primary hypertrophic biliary cirrhosis and obstructive biliary cirrhosis. The latter is secondary to obstruction of the large bile ducts due to stones, neoplasms, enlarged glands, adhesions and stenosis of the bile ducts after opening for the removal of stones. There is biliary stasis with secondary infection which leads to inflammation and fibrosis. Other types are the pigment cirrhosis of hemochromatosis, syphilitic cirrhosis, cirrhosis of chronic passive congestion, cirrhosis of carcinomatosis, toxic and infectious cirrhosis and the unclassified group.

Portal cirrhosis only will be considered. The cause of this disease is not known. A history of the excessive use of alcohol is given in over 50% of the cases. This at least seems to be a contributing etiologic factor. It may, however, occur in people who take no alcohol.

It is most often encountered in the fourth to sixth decades. Men are much more frequently affected than women, the ratio being generally about 3 to 1.

The pathology as a general rule is characteristic. The liver is decreased in size and the external surface is extremely nodular presenting a typical hob-nail appearance. It is tough in consistency and whitish pink in color. On microscopic examination the normal architecture of the lobules is gone. An outstanding feature is the connective tissue increase in the central areas. In these areas the bile ducts stand out and no liver cells remain. The cytoplasm of the liver cells contains fat vacuoles and shows a toxic degeneration. A coarse hyaline meshwork is frequently present in the cytoplasm of many of the cells. Other areas show large regenerated liver cells which are viable. Mitoses are seen in the regenerating areas.

The earliest symptoms are usually referable to the gastrointestinal tract. There is vague pain in the upper abdomen, fullness, eructation of gas, loss of appetite, nausea, sometimes vomiting and constipation or diarrhea. There is weight loss and weakness. Attacks of jaundice occur in somewhat less than half the cases. There is nothing characteristic of the symptoms so that a diagnosis is rarely made until the signs and symptoms of advanced portal cirrhosis are present. At this stage there is evidence of portal obstruction and impaired liver function. Collateral circulation has developed giving dilated superficial veins over the abdomen and chest. Hemorrhoids are common, ascites is usually present. Sometimes a venous hum can be heard over the epigastrium with the bell of a stethoscope. Edema of the extremities is frequent. Due to rupture of dilated veins in the oesophagus or stomach, there may be sudden and considerable hematemesis. The liver and spleen are often palpable. They are best palpated after the ascitic fluid has been withdrawn. Petechial hemorrhages and bleeding from the mucous membranes are common in advanced liver disease. Dullness, delirium, stupor and coma are terminal signs of hepatic failure.

It is now believed that the formation of ascites is not due to portal hypertension alone but that a reduced serum albumin is an essential contributing factor.

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Typically a macrocytic anemia is present. Leukopenia is often found. Blood is frequently present in the stool and the gastric secretion is deficient. The icterus index and bilirubin may or may not be elevated. Various liver function tests are helpful both in diagnosis and prognosis. Of these the cephalin-cholesterol flocculation test involves the simplest technique and is suitable in jaundiced and non-jaundiced cases. Low prothrombin levels which do not respond to vitamin K appear to indicate liver damage. This may prove to be a good liver function test.

Visualization of the liver and liver biopsy through use of the peritoneoscope by those with technical skill in this procedure may prove the diagnosis in suspected cases.

Recent hopeful advances have been made in the treatment of cirrhosis of the liver. Large doses of vitamins and the addition of a high protein intake to the diet are now considered of prime importance. The recommended diet is now both high in carbohydrate and high in protein. The protein is best derived from vegetable origin, milk and egg white. About half of the protein intake may come from meat. The diet should consist of about 350 to 500 gm. of carbohydrate, 110 to 145 gm. of protein and 50 to 60 gm. of fat. Especially important is to give large doses of the vitamin B. Complex. Brewer's yeast is a desirable source and may be given either in tablet form or in the powdered form. The tablets should be chewed and the powder may be mixed with tomato juice, fruit juice or milk. It is advisable to give Brewer's yeast in doses of 30 to 50 gm. a day. Thiamine chloride (10 milligrams daily) should be given. Supplemental nicotinic acid or nicotinamide may be added. Citrus fruit juices (8 to 12 fluid ounces daily) will supply adequate vitamin C. Vitamins A and D in doses of 25,000 to 50,000 international units once or twice a day are advisable. These are recommended in the form of concentrated fish liver oil. Crude aqueous extract of liver given intramuscularly in doses from 3 to 5 c.c. two or three times a week is also given.

For the seriously ill patient intravenous glucose is helpful. Blood transfusions or plasma infusions are beneficial at times.

Surgical procedures, such as omentopexy, in ascites have been very disappointing. Diuretics also have been disappointing and may actually do more harm than good.

Results with the high carbohydrate, high protein diet and added vitamins seem to be definitely better than with any other form of treatment. If the first critical year is passed, the liver may regenerate sufficiently to sustain life for years. It may be that portal cirrhosis is a deficiency disease and that more specific vitamin factors may be found for its prevention and treatment.

DISCUSSION

J. R. Hendon: In the past few months Goldblatt and his colleagues have made what is probably the nearest approach to the detection of the etiology of cirrhosis. They have demonstrated very well, I think, that cirrhosis of the liver can be caused by a diet deficient in the vitamin B complex and protein. They had noted previously that rats deprived of the vitamin B complex developed liver damage and a few of them developed portal fibrosis. When protein also was withheld from the diet a large proportion of the animals developed cirrhotic changes. These changes could be avoided or could be reversed if vitamin B complex and protein were restored soon enough to the diets.

This concept is in keeping with our observation of cirrhosis in connection with chronic alcoholics. These individuals characteristically avoid food during their drinking bouts and so achieve the same effect as Goldblatt did experimentally.

The next point I would like to make is partially dependent on the first, that is, that the treatment of cirrhosis with vitamin B and the treatment of almost any condition for which vitamin B is indicated will be far better with the use of vitamin B complex than with any one of its components or all of the components used separately. As Dr. Gettelfinger has mentioned, Brewer's yeast is one of the best sources of vitamin B complex and crude liver extract is also excellent. The superiority of the B complex over the separate factors has been demonstrated far too well for us to take any other view on the question. Volunteer human subjects have been deprived of vitamin B until symptoms of avitaminosis appeared. These symptoms could not be relieved by the separate factors of the complex, but could be relieved by vitamin B in any natural state. It is probable that certain as yet unknown factors may enter into this equation.

W. C. Gettelfinger, (in closing): I want to thank Dr. Hendon for his discussion and it is perfectly true that crude liver should be given and the B complex would come from a natural source. The fact that 50% give a history of excessive use of alcohol fits in nicely with the idea that cirrhosis of the liver is a deficiency

disease. It is felt that if those patients would eat and drink they would not get cirrhosis. Maybe those who drink a lot and don't get cirrhosis, also eat a lot. There is a lack of protein and vitamins during the time of drinking without eating.

Now, one other thing, this is still a serious disease and probably over half the cases die within the first year, which is the important year. It is actually felt that though they have ascites and other signs of obstruction, they may make a complete recovery. Some have lived for years, even though there are signs and symptoms of advanced liver disease.

NEWER METHODS OF TREATMENT OF HYPERTENSION

Luther Bach, M. D., F.A.C.P.
Newport

Much has recently appeared in medical literature as to the cause and treatment of essential hypertension. Whether it is a demonstrable disease or due to some undetermined cause, the end results are the same, if the disease persists over long enough period of time, and the interest of the physician is how to prevent the all too common complications, chief of which are cerebral accidents or circulatory failure.

In the interest of the patient, it is essential that treatment be directed toward reduction of the pressure before too much irreparable damage has been done.

To treat any disease as a symptom without some knowledge of the causative factor and the pathology produced is poor medicine and does not need the physician, but is often carried out by the patient.

Hypertension is often an unstable condition, present only under stress and within a few moments time, may show wide fluctuation, disappearing temporarily at least, under rest, mild sedatives or psychotherapeutic management. Before starting any regime of treatment a careful study of the patient should be made, not only a careful history, physical examination, but the environment and mental disturbances.

Vasomotor neurotics develop a rapid pulse together with a spasm of the vessels, which result in a temporary rise of pressure. There is considerable evidence to support the idea that these individuals have inherited an ill balanced vasomotor system which reacts abnormally to stimuli, and that they merely suffer from a temporary spasm of the vessel, but that they gradually develop an increased tonus of the arterioles.

In the report of the Council on Pharmacy and Chemistry prepared by Goldblatt, Kahn and Lewis in the A. M. A. Journal, August 8th, it states, "The present view of the humoral mechanism in the pathogenesis of renal hypertension is that renin, an enzyme or enzyme-like substance from the kidney, enters the blood stream by way of the renal veins. Renin interacts with a substance in the blood plasma identified as a globulin which has been called renin activator or hypertension precursor. The combination or interaction of these two substances results in the formation of a vaso-constrictor and therefore vasopressor substance that has been termed angiotonin. This is the basis for the present attempt to treat hypertension by means of renal extract."

This report further states, "That it is not very likely that such extracts could effect a reversal of the renal vascular disease, that probably precedes the development of the hypertension. The only benefit that can be expected from this type of treatment is from persistent administration of the renal extract. In this respect the treatment would not differ from the treatment of diabetes with insulin or pernicious anemia with liver extract."

Kidney extract is purely experimental but the results on the eye ground in hypertensives is remarkable, the pressure has shown a definite response by parenteral administration and patients state that they feel so much better while taking the extract. Reactions do occur, but it seems reasonable to suppose that they are due to sensitivity to foreign protein. No fatalities have been reported from these reactions. It is believed that there will be a reduction in reactions as purification is increased.

Of the drugs that have been suggested recently in cases of hypertension, potassium thiocyanate is the best known.

In a recent paper before the American College of Physicians, Caviness, Umphlet and Royster of Rex Hospital, Raleigh, N. C., pointed out that sulfocyanates were present in normal individuals, that hypertensives have a low sulfocyanate content, while hypotensives have a high.

An adequate concentration of this drug in the blood, maintained by daily admin-

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istration, will keep the blood pressure at a considerably reduced level and may even fall to normal in properly selected cases. The concentration must be kept near the level of intoxication before an appreciable fall of pressure occurs. Withdrawal of the drug results in a slow return of the pressure to the previous hypertensive level.

The toxic manifestations of the drug are generally known. Because of the toxic effect, the Council on Pharmacy and Chemistry has never accepted it. Intoxication is indicated by anorexia, vomiting and sometimes diarrhea. Withdrawal of the drug results in a slow return to the normal, depending on the degree of intoxication. Cardiac or renal failure, or threats of failure, are contraindications for the use of the drug. Renal failure will cause the retention in the blood of any drug normally excreted through the kidneys.

Six deaths have been reported in literature from the thiocyanate treatment of hypertension and evidence has been presented that the treatment is not free from complications which may even be fatal. Thousands of cases have been treated with the thiocyanates without fatality and with the proper selection of cases with careful maintenance of the proper blood level, it is relatively a safe drug and the beneficial results out weigh the few fatal cases reported.

Barker reported favorable results in the use of the drug in 1936 and reaffirmed his opinion in 1941 in 246 cases observed for two to ten years.

Frequent blood thiocyanate determinations should be made with a level of 8 to 12 mg% per 100 cc maintained, with a decrease in dosage should a pronounced drop in blood pressure occur.

That the drug is being generally used, is seen by the large number of publications to that effect.

A long list of drugs have been used, or are still being used, in the treatment of hypertension, but apparently have no significant effect over a long enough period of time to be of value worthy of consideration.

Various surgical operations on the nervous system have been devised for the treatment of hypertension, but in as much as they are not cures, offering only temporary relief, if at all, it hardly seems justifiable to the patient, who is not in a hopeless condition, that some relief may be offered from other procedures, and the operation may be too serious for the more advanced cases.

We should not take the fatalistic view on hypertension, but just where to begin treatment will undoubtedly vary with the individual case. Much will depend upon the degenerative changes that have taken place. Centainly we should not wait until the patient has reached the danger point of cerebral accident or circulatory failure to begin medication. Yet a persistent pressure slightly above normal probably can best be treated by careful management without medication.

A review has been made of 25 hypertensive patients, having a pressure of 180 mm systolic and 110 diastolic or more, who were kept under observation and treatment over a period of several months. Of this group, one was diagnosed as a vasomotor neurotic and treated with sedatives and reassurance; one a malignant hypertension treated with renal extract; the remainder essential hypertension, one of whom was treated with renal extract, the remaining 22 with potassium thiocyanate.

The patient diagnosed a vasomotor neurotic, an architect 39 years of age, a very nervous, emotional type of an individual, who had been under a great strain due to business reverses for the past few years, had been told 5 years previous that he had high blood pressure. The week previous to my examination, he had been rejected for a commission in the U. S. Army because of hypertension. On examination, his pressure was 190 systolic and 110 diastolic. The following week he secured a position with little responsibility or emotional disturbance, and a salary that relieved his financial embarrassment. Repeated blood pressure readings since his examination over a period of several months have been normal, the last of which was 136 systolic and 84 diastolic.

This patient had no medication other than sedatives and reassurance. In my opinion, he has an ill-balanced vasomotor system which reacts abnormally to stimuli and will gradually develop an increased tonus of the arterioles.

Two of this group were treated with renal extract, which had been prepared by Dr. Rockwell of Cincinnati for experimental use. The first, an advanced malignant hypertensive with a systolic pressure of 230-260, diastolic 130-160.

Patient was started on .1cc daily and gradually increased to 4cc. The injections were carried out from October 6, 1941 to January 6, 1942. The pressure showed some slight reduction, systolic pressure of 208-230, diastolic 120-130. Patient stated the he felt much better while taking the extract, headaches were not so severe, less blurring of vision, and not so irritable and nervous.

On January 6th, 1942, he had a reaction following the injection; chill, fever, sweating and a drop in the pressure, which lasted for three to four hours.

Due to the cardiac damage and the seriousness of his condition, the extract was not resumed and the patient died the following June from a dissecting aneurysm.

The third of this group, diagnosed as essential hypertension, with a blood pressure, systolic 160-190, diastolic 120-160, had known of his condition for several years.

Due to the high diastolic pressure, the renal extract was advised and patient started on .1 cc doses and gradually increased to 3 cc daily. Treatment was carried out from May 14, 1941 to April 20, 1942. The pressure dropped rather gradually to systolic 140-160, diastolic 100-130.

This patient had no cardiac symptoms or eye changes previous to treatment, but stated that he felt much better generally and his nervous symptoms were greatly improved. He had one reaction during the course of the treatment; chill, fever, sweating and drop in pressure, lasting 8 to 12 hours. Treatment was resumed after desensitization and continued during the greater portion of a year. The diastolic pressure has not returned to its previous high level after six months without medication.

The remaining 22 cases, none of whom showed evidence of congestive failure or advanced degenerative disease, and all of whom presented good kidney function, were treated with potassium thiocyanate. All patients were observed for several days during which sedatives were administered. When the blood pressure failed to show an appreciable drop under this medication, they were started on 4 gr. potassium thiocyanate daily, which was gradually increased each week. Blood concentrations were taken at frequent intervals. Only one patient showed evidence that might have been suspected of a toxic reaction, which consisted of nausea and vomiting.

The dosage was increased until the blood pressure was reduced to a reasonably lower level or until blood concentration had reached not to exceed 12 mg. percent.

Sixteen of the group showed a very marked and satisfactory drop in both the systolic and diastolic pressure, with improvement in clinical symptoms. The remaining six did not show any appreciable change in the pressure,

One observation was that quite a number of this group of patients who had complained of either frequent or occasional headaches, stated that their headaches were either improved or disappeared while taking the cyanates.

Conclusions

Hypertension should be recognized and treated as a disease until other causative factors have been discovered.

Kidney extracts have encouraging prospects for the future, but it is at present in the experimental stage.

Reactions from kidney extracts are apparently due to the foreign protein injected.

Thiocyanate is the treatment of choice for the present until more knowledge has been gained, but must be used with caution to avoid toxic effects.

Thiocyanates should be avoided in damaged kidneys or in congestive failure.

DISCUSSION

J. W. Scott, Lexington: In the past few years much has been learned of the mechanism of hypertension. This gives rise to a lively hope that an extract from the kidney can be elaborated which will be available for the treatment of this disease. It is clear that there is such a substance in the normal kidney. The effort to produce this in a form suitable for therapeutic use is still distinctly in the experimental stage. The work referred to, which seems to prove that hypertension is caused by a pressor substance produced in the kidney made ischemic by interference with the blood flow, has resulted in the cure of an occasional case of hypertension by removal of a unilaterally diseased kidney. Extensive sympathectomy offers prospect of relief for a certain group of these cases. It is the belief of Smithwick that it offers the greatest hope. It does not affect the renal blood flow directly and therefore is not strictly of specific value but it definitely lowers blood pressure. It is of no avail after there is significant impairment of the heart and kidneys, consequently there are few patients over fifty who are suitable for it. For the young hypertensive whose physician is able early to see, and to show to the patient, the

handwriting on the wall, it offers much. I confess that I have sent very few patients to such surgery.

The great mass of hypertensives is not in the above categories. For them the "newer methods" are not available. One must fall back upon the resources which have been in use for years and which Dr. Bach has so well summarized. Among these is reassurance of the patient, which not only helps his distress of mind but also diminishes the stimuli which are so troublesome in these "hyper-reactors." It is a fact also that many of the symptoms of these patients arise from the knowledge that the disease is present rather than from strictly somatic causes.

Obesity must be reduced and controlled by diet, carefully avoiding the fallacy that has victimized so many, that is, a diet deficient in proteins. My patients are instructed that they should have a generous portion of meat, preferably butcher's meat, daily. Useful also is rest for an hour or so daily after the midday meal with barbiturates in small doses, such as one-fourth (not one-half) of a grain of phenobarbital two or three times a day.

As for specific drugs, my reliance, like that of Dr. Bach, is upon potassium thiocyanate. Toxicity must be guarded against. The best safeguard is determination of the blood level of the drug. This test is not available, obviously, to most practitioners but, while hazards are increased in default of it I think the benefits of the drug should not be denied to such patients.

My idea is that the nitrites, whether those of short or prolonged action, have no place in this connection. Soma Weiss has pointed out the fallacy of their use.

In short, the great hope of therapy in this disease is for a specific substance, probably in the form of a kidney extract, perhaps even in synthetic form, which will increase renal flow, specifically lowering blood pressure. In all of this discussion hypertension is taken to mean diastolic hypertension.

Luther Bach, (in closing): The thiocyanates definitely do have a limited use. I do not feel that every patient who has hypertension is a patient for thiocyanate. I also feel that patients with hypertension who are selected for the thiocyanate treatment should be selected with care, particularly to see that there is no damage to the kidney, that the kidney will give a free elimination, that your drug will not be stored up in reserve in the kidney, and also that the patient has a good circulation without congestive failure, that we do not get the storing up of the drug with toxic effects.

I feel I cannot emphasize too strongly the importance of the blood concentration. We do the blood estimates on our sulfathiazole, sulfanilamide, and all these drugs, and we are taught for quite a while the importance of that. Within the past year Barker has devised a small colorimeter with which a reasonably accurate blood determination within a short period of time can be made.

FIRST AID CARE OF FRACTURES

Richard T. Hudson, M. D., F.A.C.S.
Louisville

Let me recommend that you get a copy of "The American Red Cross First Aid Textbook."

Fall and automobile accidents are the two leading causes of fractures. Fortunately, auto accidents have decreased considerably in the last few months due to less driving and lower speed.

Whenever a fracture is suspected in an accident case, the patient should be treated as if he has one and the part splinted. The one watchword in the handling of fractures is: GENTLENESS. If there is deformity or much pain, do not manipulate to get crepitation, but splint and get an x-ray as soon as possible. The patient should not be moved, until there is sufficient help present to move him without pain and until the conveyance to transport him has arrived. "Splint them where they lie." A traction splint should be applied in extremity injuries.

The Red Cross First Aid Textbook advises: 1. Prevent further damage (by not handling the injured parts roughly.) 2. Make the patient comfortable. 3. Treat any shock that is present. (Morphine). All of which I feel is good advice. In compound fracture the question arises whether to reduce the compounding immediately or whether to apply sterile or antiseptic dressings and transport the patient to a hospital for complete care. Circumstances will determine in many cases the best procedure. All compound cases that are reduced either accidently or purposely should be marked when sent to the hospital, so the receiving surgeon will know how to proceed.

If the patient is unconscious after a severe physical injury the unconsciousness is usually due to a head injury, and all head injuries are serious. It is well to note the size and condition of the pupils, whether there is bleeding from the ear (a good sign of fracture) or from the

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nose. These patients should be handled as little as possible. Keep warm. Do not give stimulant. Apply cold cloths to the head.

Fractures of The Extremities: Use fixed traction, in splints. 1. Keller-Blake for the leg (modified Thomas splint.) 2. Murray-Jones, for the arm. Traction reduces the pain and shock that attend a fracture and lessens the chance of further damage to the soft tissues. A traction hitch is placed around the foot and ankle and the Keller-Blake splint applied and the traction fastened to the lower end of the splint, then the leg secured to the splint with bandages. The whole splint and leg are suspended from the roof or upper part of the ambulance during transportation. If no special splints are available, the leg can be splinted by long narrow boards, which are padded and attached with muslin or flannel bandages. The joint above and the joint below the fracture should always be fixed. For the forearm a thick magazine or padded news papers may be used. For the knee or lower leg a pillow makes an excellent splint. It may be reinforced with thin wood splints and fastened with safety pins and muslin bandage.

Compound Fractures: Compound fractures may be: (1) from within and (2) from without. Those from within are usually pinhole in type and often can be treated conservatively by antiseptics and closed reduction. Those from without are much more serious and much more often lead to infection and delayed union. These fractures should be treated as serious emergencies in the operating room. The wounds should be explored sufficiently that one is satisfied that all the dirt and foreign material is removed and the tissues and bones are clean. The wound should be copiously irrigated (4-5 gallons) of normal saline. Sulfanilamide or sulfathiazole is then sprinkled or insufflated into the wound. If the fracture is less than eight hours old the fragments should be approximated and the wound closed and the fracture then treated as a closed fracture. No fragments of bone should be removed in a flesh compound fracture, in my opinion, unless grossly contaminated. Sometimes plates, wires or screws may need to be used, or pins in a machine, can be used especially in the lower leg fractures. I believe closed fractures should be kept closed whenever possible.

Fractures of The Spine: These fractures constitute a fair percentage of serious injuries and require especial care. If fracture of the cervical spine is suspected, the patient should be kept on his back and the head carefully supported by sand bags or manually. If fracture of the dorsal or lumbar spine is suspected the patient should be kept flat either on the back or abdomen and on the abdomen if he is to be transported. These cases are never allowed to sit up. Keep the spine in hyperextension and handle as little as possible. They may be transported on a shutter or door to advantage.

FRACTURES OF THE SPINE

Orville Miller, M. D.
Louisville

To keep within the time limit set for the presentation of this subject, the author finds himself without hope to do more than, at best, to evoke such discussion among the listeners as will provide whatever value and profit that may accrue from its consideration.

Fracture of the spine has increased in frequency tremendously in recent years, because of increases in building, mining and auto-motive activity. Because of greater opportunity to study this very disabling condition, the profession has become much more proficient at diagnosis. Fewer and fewer cases of unrecognized fracture of the spine are met with, in the experience of the author, at least.

The symptoms vary widely, depending on the extent and type of fracture, on its location in the spinal column, the location of the fracture of the individual vertebra, and the degree of complication of the soft tissues about it. And, indeed, a fracture may exist with practically no symptoms present. The general symptoms may be those found accompanying fractures anywhere else. These are well known as swelling, sensitiveness to pressure over the fracture, crepitation, loss of function, deformity and discoloration. But, it is exceedingly seldom that one will find a case presenting such a classical array of evidence of fracture. Nor, is it the better part of wisdom, always, to attempt to elicit loss of function or crepitation. Because of lack of time, no discussion will be attempted to set forth the symptoms in all the variations mentioned above. A suggestion is made that anyone found giving a history of injury of the spine, have a painstaking X-ray examination. Question-

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able cases should have the benefit of laminagraphic study.

Every case of fracture, or suspected fracture, should have utmost care in handling. The unfortunate victim should be picked up in such a manner as to hold the spine absolutely rigid, no flexion forward nor laterally, nor any hyperextension nor torsion should be allowed to take place. This is extremely important because of the danger of dislodging some of the fragments and thus producing injury to the spinal cord, or some nerve trunks outside the cord. Provocation of hemorrhage along fracture lines, or in surrounding structures may add to the gravity of the case or to the prolongation of recovery.

If shock does not prevent, a reduction of the fracture by traction and hyperextension may be attempted in those cases which are unattended by severe complications. Rather strong traction is often required to release firmly impacted fragments. The author places the patient on a fracture table and anchors his feet to the foot pieces. A sheet is folded to make a sling to extend around the operator's body and is attached to a Sayre's suspension sling applied to the patient's head. By bracing himself against the head of the table, the operator may apply the entire weight of his body to produce traction on the patient's spine while at the same time, hyperextension of the body is accomplished by an assistant. X-rays taken while the patient is in this position will note improvement in the position of the fragments as it takes place.

When reduction has been accomplished, plaster-of-Paris is applied from the axillae to about one inch below the anterior-superior spines of the ilium, and to maintain the position of the body that has been found necessary to permit reduction.

When, because of shock or of complications, an immediate reduction is not feasible, the patient is placed on a Bradford frame. The frame is previously bowed so as to maintain hyperextension of the spine. Occasionally, weights are applied to the pelvis with counter-traction on the head or vice versa.

Complications such as paralysis of the extremities, of the bowel and bladder and of the muscles of the trunk may soon disappear if they are brought about by concussion of the cord without any physical injury to it. The author, therefore, is inclined to wait for a few days, until it is definitely shown whether or not relief may be spontaneous, before any open surgery is considered. In those cases where it is definitely known that pressure on the cord by a fragment of bone is present, a laminectomy is advised, for removal of pressure. Once the fragments of bone have been brought into proper relationship, one with another, and external fixation accomplished by a plaster-of-Paris cast, if no injury exists to the pedicles nor the articular facets, the patient may be allowed to sit up or walk about, in about six or eight weeks, or earlier, but some form of fixation or support for the torso should be worn for several weeks or months following removal of plaster.

Prognosis in fracture of the spine should always be guarded as to return to normal function. With proper care, the vast majority of patients may be returned to normal activity, if not to heavy labor, however.

DIAGNOSIS AND TREATMENT OF HIP FRACTURES

Robert Woodard, M. D.
Louisville

This brief paper is intended for the general practitioner and not for the bone specialist as it will only be a repetition of the general accepted management of these cases.

Fracture of the neck of the femur generally occurs in patients over 50 years of age and is usually caused by a trivial strain, stumbling or slipping. When these cases are first seen it is important to remember that every elderly patient after hip injury who complains of pain referred to the hip or has even a slight external rotation of the foot must be assumed to have a hip fracture. In a small percentage of patients they are able to move the hip and even walk despite the bone injury. Sometime shortening of the affected leg does not appear for several days or weeks. In patients who are extremely feeble, the injury occasionally results in a terminal event. Complications of hypostatic pneumonia or uremia may not be the cause of death as shock alone is sufficient to cause death in ten to fourteen days after injury. In these extremely feeble patients a twelve to fifteen pound traction is applied to the leg to relieve muscular spasm and permit the patient to be turned and placed in a sitting position.

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When deciding whether active treatment should be instituted age alone should not be considered as we all have had many patients over the age of eighty who have obtained a good functional result without pain. Since the moderate method of operative treatment has been accepted there is no justification for the pain following an ununited fracture. Old people have as much right to be relieved of pain as the young. If the immediate effects of the accident will permit, a nailing operation should be considered and seldom withheld.

There are two types of fractures of the neck of the femur. Abduction fractures which are sub-capital and impacted, adduction fractures which are transcervical and sub-capital and may occur at any level of the neck or intertrochanteric.

The fragments of the adduction type of fractures are never impacted, as weight bearing across the fracture surface causes a shearing motion. For this reason adequate immobilization must be secured.

Impacted abduction type fractures often unite without treatment. The hip is held in coxa valga deformity and sometimes there is apparent lengthening of the affected leg. Weight bearing has a tendency to more firmly impact the fracture as the axis of movement directs the weight through the fragments, where in adduction fractures, the weight is transmitted across the line of fracture causing a shearing and non-union.

I believe that Whitman contributed more toward the successful treatment of hip fractures than any other one man. By abduction, internal rotation and extension of the limb he succeeded in reducing the fracture and demonstrated that immobilization in a well fitting plaster spica to maintain reduction resulted in many of the fractures uniting. But the disadvantages of Whitman's technique are:

1. It is necessary to immobilize the knee joint for a considerable length of time. Usually elderly patients have arthritic joint changes and this immobilization may result in stiffness of the knee.

2. It is necessary for the spica cast to remain on from six to twelve months resulting in severe hardships in elderly people.

3. Very seldom is a plaster spica molded closely enough to prevent rotating movement of the pelvis, especially in obese subjects. If complete immobilization is not maintained until firm bony union, this fracture, like any other, will not unite. Non-union resulting from rotation and shearing strains will produce hyperemic decalcification and gradually absorption of the neck.

It was formerly thought that some degree of shortening of the neck, due to bone absorption was inevitable. This is not true. It was true when immobilization was imperfect, but with present methods of internal fixation we do not have bone absorption. If fixation is complete the fracture will unite even though the reduction is imperfect. Many methods of internal fixation have been tried, such as screws and round and square nails. They were all discarded because they would not prevent rotation of the fragments and the metals caused reaction in the bone.

Smith-Pertersen introduced the three flanged nail made of rustless steel that almost completely solved the problem. This nail combines maximum surface area with minimum bone displacement and prevents rotary and angulatory movement, and was originally intended for fractures of the neck of the femur. This procedure has encouraged surgeons as to the possibilities of other methods.

Henderson's leg screw has the advantages of impacting the fragments by pulling the head and neck together but the bone displacement is greater. I do not believe that rotation of the fragments is prevented as effectually as with the Smith-Pertersen nail.

Austin Moore's multiple wire fixation has been and is being used successfully in fractures of the neck of the femur but personally I would prefer to limit this method to the comminuted intertrochanteric variety. However, I believe that the Smith-Pertersen nail is preferred in the great majority of this class of fracture.

The poor results I have observed have been, in my opinion, due to the faulty position of the insertion. The nail should be driven in at a lower level from 1½ to 2 inches below the greater trochanter instead of the usual position of ½ inch below. In this position it is more vertical and is held in greater bone thickness below the fracture. If care is not taken there is a greater chance of splitting the femur than the trochanter. The cortex of the bone should be removed almost as large as the nail itself.

Lawson Thornton of Atlanta, has divised a metal flang that screws into the head of the Smith-Pertersen nail and extends over the intertrochanteric fracture.

This has been successfully used by a number of surgeons.

In summing up I would say that I believe that poor results from internal fixation are due to inaccurate nailing and not to the method employed.

DIFFERENTIAL DIAGNOSIS OF GASTRIC ULCER AND GASTRIC CARCINOMA

Frank M. Stites, Jr., M. D.
Louisville

Probably few subjects in medicine should be studied by groups rather than by an individual any more than the two subjects presented tonight. But unfortunately it is not always feasible to work in such close association, and in choosing this subject I was informed of Dr. Frank's subject and decided to review the diagnostic phase, presenting a few illustrations that we have seen together. This paragraph reminds me of the portion of a preface appearing in a publication from the Mayo Clinic some years ago and written by the Drs. Mayo, in which they said "Here a group of men have presented . . " not the general opinion of a number of men, but the opinion of a group who are working together as one man on the patient, in an attempt to give the patient the advantage of what is known.

This idea is further borne out by the type of men who write on this subject, by that I mean those who do surgery as well as the internist. Of course it is primarily a diagnostic question and diagnosis is not limited to any specialist or any group.

Earlier authorities even from Hippocrates knew that internal cancers existed. Early Greek physicians, later prominent men in Arabia, then in Spain and other European countries made some progress in studying this subject, but no pathological reports exist prior to the 15th century. The first detailed work on gastric pathology was published by Morgagni in 1761. From this date to 1837 when Bayle's work was published after his death, there were only a few prominent authorities, most of whom were French and of whom Laennec was best known. Bayle was truly ahead of the other men of his day for the next 75 years produced no new material. Then from 1830 to 1858 Cruveilheir really proved that there was a benign chronic ulcer of the stomach as well as a cancerous type. Also about this time Golden Bird demonstrated the value of gastric analysis as a differential aid and this was further emphasized by Kusselmanns Clinic with the use of the stomach tube.

Brinton in 1858 deals at some length on the difficulty of differentiating benign and malignant ulcers of the stomach.

Trousseau in 1865 was quite impressed with gastric analysis as an aid in differential determinations. Also in 1879 van den Velden stressed the decreased acidity as always suggestive of malignancy.

However the greatest modern advance was made when the German roentgenologist perfected the roentgenoscope about 1910, although the Mayos in 1905 with their outstanding pathologists Wilson and McCarty, demonstrated that what many times appeared as benign lesions, on close study were revealed to be malignant.

There are many approaches to such a subject as this but I plan to present the subject as the cases usually unfold themselves in a routine practice, namely an evaluation of symptoms as elicited from the patient either voluntarily or in a carefully secured history, next the significance of physical findings, then the interpretation of laboratory study and lastly the interpretation of treatment both medical and surgical, including the pathological reports.

In cases of this kind a history seems to me of prime importance and although it is time consuming will probably be of inestimable value both during its recording and again after the thorough review of findings. Thoroughly review the symptoms as given and try to determine if the symptoms of indigestion are of prime importance or are merely incidence of trouble in some other than the digestive system. Care must be exercised in determining whether the symptoms are true or whether there is a nervous background and an anxiety complex regarding the digestive system. Occasionally it will be necessary to go behind the mask created by the patient in their effort to deceive the physician fearing to give the true picture.

Duration of symptoms are of prime importance and especially whether there has been a change recently from the symptoms which existed for several years previously. Periodicity of symptoms should be determined both as to the regularity each day or change during certain times of each year or any relation the symptoms might bear to the ingestion of food.

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After the patient has given his story it becomes the task of each conscientious physician to evaluate those symptoms and secure further elucidation from the patient in an effort to draw the proper conclusions as to the handling of the case, realizing that these conditions which are functional, dietary or nervous in character can and usually should be treated medically and on the other hand those cases thought to be benign but organic can usually be given a period of medical management, hoping for satisfactory results, but very positively knowing that all malignant and all borderline cases should have surgical exploration and where possible surgical treatment.

The most important and valuable symptoms in determining a differential diagnosis in those cases is pain. First be sure that the symptom is pain and not discomfort. This threshold is so variable that it frequently taxes the ingenuity of the best to truly evaluate this symptom. Learn every detail of the symptom, when it comes, where it is located, its duration, distribution, what provokes the pain and when it is relieved and what gives relief.

Patients with ulcer usually give a history of pain, occurring 2-3 hours after meals, relieved by alkalies and food, usually extending back for several or even many years and with periods of freedom from symptoms, only to recur again. Those patients show improvement under care and usually learn of alkaline relief but this is not true of those patients with malignant lesions. Usually they have enjoyed good health until a short time before seeing the physician and their physical changes are out of proportion to the severity of the symptoms or the duration. These cases should be viewed with concern. The other type of case is that individual who has had rather typical ulcer symptoms but recently has shown changes different from those of previous episodes. He should be viewed as a benign case that probably has or is undergoing malignant changes, or has developed a malignancy concurrently with his ulcer.

In this study I am not considering pain suggestive of gall-bladder disease, urinary tract disease, coronary disease or pelvic disease, but am not forgetful of the fact that they must be given due consideration in the broader differential study.

Of the symptoms suggestive of reverse peristalsis,such as vomiting, nausea, heart burn, regurgitation and belching, most often occurring in this order, by far the most important is vomiting. It may be of nervous origin or induced, but in these cases usually comes soon after ingestion of food. If on the other hand it comes hours after eating, it is most suggestive of obstruction or at least interference with emptying and denotes obstruction if it is persistent. This is at the time or in a very short time associated with weight loss and means an organic disease. In the later stages the material may in itself be rather diagnostic as the so called coffee grounds vomiting. If nausea is prominent it is most often suggestive of a low digestive tract or pelvic lesion and less often associated with either a benign or malignant lesion of the stomach.

After eliciting such points in the history and following them as carefully as possible it is usual to complete a thorough physical examination. The general musculature of the patient will many times indicate whether the patient is maintaining a fair state of nutrition or whether there is loss of tone indicative of a debilitating state as would be associated with an organic disease of a serious nature. I do not think epigastric tenderness is found as frequently in gastric ulcer as in duodenal lesions and unless a malignant lesion of considerable size, palpation is seldom of much help except in the more ptotic type of individual where frequently early lesions may be suspected.

Laboratory measures many times lend aid in differential work but are not to be depended upon too closely. In spite of all the criticism of gastric analysis, to me it is of value and I do not think a case is properly studied where digestive symptoms are at all prominent unless some effort is made to study the secretory functions of a stomach. To me high acids and high volumes are suggestive of ulcers while low acids or anacidity suggests malignancies or pernicious anaemia. I know that there are exceptions to this but a uniform practice in those cases will be helpful. I think histamine test is the most helpful as well as most accurate and certainly excells the Ewald method.

After studying a case to this point and thinking that an organic lesion exists, it is not only helpful but I think essential to follow the more accurate method of present day X-ray study, emphasizing the mucous membrane relief study but using the mixture in small quantities. Early lesions either benign or malignant can more

easily be detected, and then later a filled stomach can be studied. The advanced malignant lesions are usually easily found but the minute study of the mucosal folds many times enables one to realize whether it is safe to institute some medical management before recommending surgery.

Lastly as a diagnostic aid is the use of the gastroscope which in the hands of the trained is another step to help differentiate what may be even to the roentgenologist a difficult question. Schindler states that every patient over 35 in whom a gastric niche is demonstrated should be gastroscoped. Not all lesions come within the view of the gastroscope and it is only another method that when positive is a great help and when negative still leaves some grounds for uncertainty.

Von Harberer in pointing out diagnostic errors does not think that in spite of even thorough modern study of cases has there been any improvement in differentiating callous ulcer and carcinoma.

Finally I would state that all gastric ulcers that do not show improvement of symptoms in one week on diet and therapy, disappearance of symptoms in the second week with absence of occult blood and a diminution of the niche by one third after three weeks treatment should be viewed with suspicion of being malignant and subjected to exploration and surgery.

In conclusion I would like to summarize this question rather briefly:

Differentiation can not be done in all cases. Benign characteristics or malignant characteristics should be studied and evaluated, if there is doubt, then advise surgery.

Under ulcer management symptoms may subside and benign cases will improve but malignant lesions will continue to grow as demonstrated by X-ray.

Over 45 years of age be suspicious of malignancy and below that age benignancy is more common but benign may occur as late as 50-60.

Duration of symptoms is helpful but not safe. If symptoms are characteristic of ulcer and last for years with periodicity it is likely ulcer.

Gastric analysis is helpful but do not place too much dependence upon it. Malignancy may be accompanied by high acidity.

Stool examination is of little help. X-ray is most helpful diagnostic measure. Gastroscope is important but not indispensable.

Case Reports

Mr. E. W. Y., age 45, was first seen because of irregular digestive upsets for several years. Physical examination was essentially normal. Test meal study revealed a marked hyperacidity with blood present. X-ray examination showed a diffused hypertrophy of the mucosa, large penetrating pyloric ulcer with considerable induration about it. Patient was treated medically for 6 months with improvement, gain in weight and relief of symptoms, but one year later returned, symptoms again present and laboratory examination revealed ulcer still present and of the same character. Surgery was advised and he was operated November 18, 1935. Pathological report showed a pyloric ulcer. At present he weighs 180 lbs. free of all symptoms and follows no diet restrictions.

Mr. I. K., age 37, seen by me February, 1927, having been referred by his family physician, weight 136 pounds, blood count 3,000,000 R. B. C., 6,500 W. B. C. Test meal study revealed normal amount of contents with no HCl in any fraction. X-ray at that time of gastro-intestinal tract and gall-bladder was reported as follows: "This patient evidently has pathological gall bladder with probable reflex condition to the duodenum. Judging from the irregularity of the cap it is possible that there is a certain amount of scar tissue present from previous duodenal ulceration, although it is possible to get a deformed cap secondary to the gall bladder pathology. Negative for appendix, colon is also negative." Patient was sent back to his family physician and was not seen until August 1938, stating he was losing weight, and having discomfort in epigastrium and pain in right side. X-ray examination revealed a carcinoma of the body of the stomach involving chiefly the wall and growing externally. Surgery was advised and accepted. About two-thirds of the stomach was removed and final report showed an adeno carcinoma of stomach with no metastasis to the lymph nodes. Patient gained a few pounds and remained rather static until February 1941 at which time he showed a gain of about six pounds. One year later having lost eight pounds in weight and looking badly he was again X-rayed and showed no evidence of recurrent carcinoma. At this time I persuaded him to discontinue use of tobacco and increase the liver concentrate and when last seen one month ago show-

ed a gain of twenty pounds, blood count 4,800,000 R.B.C. with complete freedom of symptoms.

Mr. D. S., age 46, was seen September 28, 1941 complaining of flatus and eructation, abdominal discomfort, bearing no relation to meals. He stated that he had lost no weight and been in usual health to one month previous to office visit. He weighed 150 pounds, physical examination was essentially normal, blood count R. B.C. 4,460,000 W.B.C. 8,500 with normal differential, urinalysis was essentially normal. Test meal revealed 240 cc of stomach contents removed fractionally with no free or combined HCl present. Total acid was 22 and 15 respectively at 45 and 60 minute intervals. X-ray examination revealed an annular carcinoma of pylorus with ulceration. Operation one week later revealed grade 1 adeno carcinoma of stomach. Patient remains in good health now, 14 months after surgery.

Mr. J. M. S., age 63, was seen because of mild irregular digestive symptoms. Physical examination was essentially normal except for moderate hypertension for which he had received treatment for two years. Test meal examination revealed marked hyperacidity with blood in each fraction with moderate degree of retention. X-ray examination showed a lesion classified as ulcerative carcinoma of pylorus. Ulcer management was instituted for one week's time with relief of symptoms and X-ray was again checked with the conclusion of ulcerative carcinoma involving pylorus and pyloric canal. Patient would not consider surgery although it was advised and he continued to improve. Eighteen months later he had a very definite attack of coronary occlusion and was brought to my office. He has since been under the care of a competent Cardiologist and with dietary restriction and medication for his hyperacidity has gained weight and is in good physical condition aside from his coronary disease.

Mrs. K. S., age 69, seen by me April, 1942 having previously been a patient of one of our outstanding men who had gone into military service. She gave a history of being treated for diabetes for past two years but still was losing weight, although on an adequate diet and taking a small dose of insulin and having at that time a normal blood sugar. Weight loss continued and on October 1 was called in an emergency because of vomiting a large quantity of blood. This was controlled. Subsequent X-ray reported ulcerating carcinoma of posterior wall of pylorus. Exploration was advised. Surgery revealed no organic lesion of stomach but a definite cirrhosis of liver.

OBSERVATIONS ON CANCER OF THE STOMACH

L. Wallace Frank, M. D.
Louisville

Within the past decade I have seen a number of cases of carcinoma of the stomach and have operated on a fair proportion of them. It is not my purpose to outline the symptoms of this disease nor to discuss its differential diagnosis and its treatment. Instead of presenting a stereotyped paper on this subject I thought it would be much more interesting to present two or three cases and comment upon them.

Case Report: W. M. S., white, male, aged 68, a farmer, was referred to me by Dr. Virgil Simpson with a history of indigestion of some months duration. He also suffered from loss of appetite, nausea, vomiting and diarrhea. For sometime he had had a constant dull pain in the epigastrium and had noticed that his stools were tar colored. He had lost 45 pounds in weight. His pulse had been intermittent for years.

Physical Examination: Examination reveals a thin, undernourished man with evident loss of weight. Examination of the head and neck was essentially negative. The lungs were apparently normal. The heart was irregular, every third and fourth beat being a premature contraction. The capillary circulation was poor. Blood pressure 124/90.

The abdomen was of the scaphoid type, the walls thin and atonic. Peristalsis was visible. There was decided tenderness in the epigastrium but no masses were palpable. The liver and spleen were not palpable. Rectal examination revealed the presence of hemorrhoids, the urinalysis was negative. Blood count showed marked secondary anemia.

Electrocardiogram: The tracings were characteristic of marked advanced myocardial disease.

Gastric analysis showed free hydrochloric acid 24, combined acid 4 and total acidity 36 at the end of one hour. At the end

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of seventy-five minutes the free hydrochloric was 40, combined 14 and the total 60. At the end of one and one-half hours free hydrochloric acid was 30, combined 10 and the total 44. Occult blood was present in all specimens.

X-ray examination revealed an obstruction at the pylorus with no definite filling defect. The duodenal bulb was never seen. At the end of six hours there was a fifty percent gastric retention.

The patient was sent to the hospital and after several days preparation was operated.

Operation: Exploration of the abdomen revealed a large mass at the pylorus completely obstructing the outlet. There were one or two small glands on the lesser curvature of the stomach close to the growth. There were no cancerous implants in the pelvis and no evidence of metastatic growths in the liver. On account of the man's weakened condition it was decided to do a gastro-enterostomy as a preliminary to resection. A posterior-gastro-enterostomy was then done making the anastomosis well up into the fundus of the stomach.

The convalescence was rather stormy. The patient had one or two blood transfusions and other supportive treatment and finally recovered. He left the hospital twenty-five days after admission in fairly good condition. Three weeks later he returned to the hospital. He was much stronger and had gained nine pounds. The epigastric pain was greatly diminished. His appetite was good, the nausea, vomiting and diarrhea had entirely ceased. His general examination was essentially negative. The blood pressure was 136/90 and the cardiac action irregular.

Two days after readmission to the hospital he was recperated. There was no evident change in the size of the tumor. A subtotal resection of the stomach was done using the Petz clamp. From this operation he made a smooth recovery and left the hospital fourteen days after operation.

Pathological Diagnosis: Advanced adeno-carcinoma of the stomach, in the center of which is an ulcer resembling chronic gastric ulcer.

Comment: This case is of interest because it raises the question whether the carcinoma was engrafted onto a chronic ulcer or whether the primary lesion was an ulcerating cancer. There is still much discussion of the relationship of gastric ulcer to carcinoma. Some authors believe that forty to fifty percent of gastric carcinomas arise as the result of chronic gastric ulceration. I am very glad that Dr. Stites has so ably presented the discussion of this phase of the subject.

Whether gastric ulcers develop into cancer is of academic interest. Most surgeons, I am sure, are in agreement regarding one phase in the treatment. Any ulcer of the stomach that does not show complete healing within six weeks after strict medical management should be considered probable cancer and treated surgically. Also should there be occult blood in the stool (patient being on a meat free diet for several days) even though the x-ray shows apparent healing the case should be considered as surgical. It is almost impossible to distinguish between a chronic indurated ulcer and gastric carcinoma even when the patient is open and the lesion can be seen and palpated. How much more difficult is it then to make this differentiation from a study of shadows on the fluoroscopic screen and a study of x-ray films.

Another feature of the case which was of interest to me was the fact that by doing a two stage operation the patient was successfully brought through a most serious operation. He was a bad risk for any type of surgery and I am certain would never have survived a primary resection of the stomach. Due to the fact that his starvation was relieved by gastro-enterostomy it was possible later to remove the growth. It has been two and a half years since this man was operated and he is still perfectly well.

Case Report II. I. K., white, male, aged 49, was referred to me by Dr. Frank Stites. He stated that he was well until two and a half months ago when he began to have pain in the upper right abdomen. The pain was sharp and traveled across the abdomen and across the back at the same level. The pain came on at no regular time and would continue for one-half to three hours. There has been no nausea or vomiting. Other than being slightly constipated and somewhat anemic he is perfectly well.

Physical Examination: Examination of the head, neck, heart and lungs revealed nothing abnormal, blood pressure 112/70.

The abdomen was scaphoid. There was no tenderness nor could a mass be palpated. The liver edge was palpable on deep inspiration. Rectal examination was negative, the urinalysis was negative.

Blood Count showed R. B. C. 3,390,000, W. B. C. 8,250, Polys 79, Hemoglobin 54 per cent, blood urea nitrogen 18.6 mgms per cent.

X-ray examination revealed a filling defect high up on the lesser curvature. A diagnosis of cancer of the stomach was made and the patient sent to the hospital.

Operation: Exploration revealed a tumor a little larger than a hen's egg high up on the lesser curvature. There were a few hard glands along the greater and lesser curvature. There were no implants in the pelvis and no sign of metastasis in the liver. The lesion was so high that it was impossible to get a clamp straight across the stomach above the site of the lesion therefore two pairs of clamps were used, the clamps being set in at an obtuse angle. The stomach was then removed and a retrocolic Hoffmeister type of anastomosis done. Examination of the stomach after resection revealed the fact that the suture line on the lesser curvature was less than one inch from the diaphragm.

Pathological Diagnosis: Study of the specimen revealed an adeno-carcinoma of the stomach, the lymph nodes showing no evidence of carcinomatous invasion.

This patient developed postoperative pneumonia and also a slight infection in the abdominal incision. He made a nice recovery from both complications and is now alive and well three and a half years since operation.

Case Report III. L. B., white, male, aged 55 was referred to me by Dr. Jasper of Somerset. This patient stated that for several years he has had indigestion characterized by pain in the epigastrium coming on about two hours after meals and relieved by food and soda. Occasionally he would have an attack of vomiting but never vomited any blood until about two weeks ago. At this time the vomitus contained bright red blood. He has never noticed any blood in the stools nor have the stools been "tarry." He has been under treatment for "ulcerated stomach" for the past several years. In the past few months he has lost considerable weight.

Physical Examination: Examination of the head, neck, heart and lungs was essentially negative.

The patient was thin and showed evidence of great weight loss. The abdominal wall was thin and relaxed. In the epigastrium was a mass about the size of a man's fist. It was nodular, tender and apparently movable, the liver and spleen were not palpable, rectal examination was negative, blood pressure 118/80, urinalysis was negative.

Blood Count showed R.B.C. 3,000,000, W.B.C. 7,700, Hemoglobin 52 per cent, Polys 76, blood urea nitrogen 22 mgms per cent.

X-ray examination revealed an enormously dilated stomach containing a great deal of fluid. There was a large irregular filling defect involving the greater part of the distal half of the stomach. This was characteristic of a very large carcinoma. There was no interference with the passage of the material through the pylorus into the duodenum. The duodenal cap was enlarged but not remarkable otherwise.

X-ray Diagnosis: Fungating carcinoma of the stomach.

Patient was referred to the hospital and after several days of preparation was operated.

Operation: Exploration of the abdomen revealed a tumor mass in the stomach about five inches in diameter. The mass was freely movable. There were no implants in the pelvis and no nodules in the liver. The growth had invaded the gastrocolic omentum and also the transverse colon which was fixed to the stomach. There were new glands along the lesser curvature of the stomach and some along the greater curvature at the juncture of the stomach with the duodenum. The stomach and transverse colon were resected, taking out about two-thirds of the stomach and ten inches of the transverse colon. The ends of the colon were turned in and a lateral anastomosis then done. An antecolic anastomosis of the jejunum to the stomach was then done using the Hoffmeister technique.

Pathological Diagnosis: Examination of the specimen revealed an adeno-carcinoma of the stomach of the fungating type with necrosis and acute inflammation. There was a perforation between the stomach wall and the colon due to extensive necrosis of the carcinoma. There were adhesions and inflammation of the transverse colon and omentum and metastasis of carcinoma to the areolar tissue and colonic vessels.

A wound infection developed which soon cleared up and the patient left the hospital about eighteen days following his operation.

This man was operated eighteen months ago. He is working every day, has gained thirty-eight pounds and is perfectly well

except for an occasional attack of indigestion when he over eats.

COMMENT: Inasmuch as the comment to be made concerning the last case can be said about the preceding one I thought I would consider the two cases together. There is one very important lesson to be learned from each. Namely, that no patient with cancer of the stomach should be considered inoperable regardless of the site of the lesion or the size of the tumor Successful removal of the entire stomach has been done and the patients have enjoyed more or less good health for varying lengths of time. I think that too often after a study of x-ray pictures we come to the conclusion that the patient is inoperable and nothing is done. Only too well can I recall one case who had been seen by a surgeon three years before I saw the individual. A diagnosis of cancer of the stomach had been made but she was not operated. When I opened her three years later on account of complete obstruction of the pylorus the growth was still resectable except for the fact that it had now grown into the head of the pancreas. There were no evident metastases in the liver nor were there any peritoneal implants. I am convinced that had this patient been opened three years earlier she might have been cured or her life prolonged. I believe that a resectable growth of the stomach should be removed even though there are metastases in the liver. Death resulting from these metastases is relatively comfortable when compared to what the individual with a large obstructing stomach cancer must endure. Furthermore, we have all seen patients in whom, following the removal of the primary growth metastatic lesions either undergo partial regression or grow exceedingly slow.

Within the past 12 years I have explored twenty-six patients having cancer of the stomach. Of this number eight of them were absolutely hopeless due either to peritoneal implants, liver metastasis or the fact that the growth had invaded adjoining structures. Of the remaining eighteen cases, nine were resectable and the other half were treated by gastro-enterostomy to relieve pyloric obstruction. In this latter group there was extensive disease and often wide spread metastasis. However, on account of pyloric obstruction gastro-enterostomy was done to prevent starvation. The operative mortality of this group of 26 patients was approximately fifteen per cent. There have been no operative deaths in the last fourteen cases.

In conclusion I would urge that patients presenting gastric symptoms be thoroughly studied. We should not accept as evidence x-ray pictures made a year, six months or even three months previously. The manifestations of gastric cancer are often unnoticed by the patient and it is only by frequent roentgenological examinations that early resectable cases of cancer of the stomach will be observed.

Finally, it may be said, "The risk of an operation is insignificant when the patient has a lethal disease."

DISCUSSION

Misch Casper: Dr. Frank presented two types of cases, fairly late. The problem is to get them early. Dr. Stites called our attention to some of the early symptoms, which are too few in gastric carcinoma. I believe we will come nearer to gastric ulcer, as a rule, in the blood picture than in the stomach symptoms. Another thing, we are more apt to make a mistake in differentiating pernicious anemia from cancer than ulcer. Ulcer gives symptoms we do not find in cancer, unfortunately. I have often said before, pain is a great friend of the surgeon and of the patient; that is, it takes the patient to the doctor, who can thus make a diagnosis at an earlier date. On the other hand, those patients who slip gradually away, with no pain, do not think that much is the matter with them, and hence, do not go to the doctor. The great goal in these cases is to get early diagnosis.

X-ray has been our greatest aid in early diagnosis of any kind. I think gastroscopy has something for the future, but details and much of the technique have yet to be worked out. Just look how long we were perfecting the use of the roentgenoscope in making diagnosis in cancer and ulcer of the stomach. I remember the early years of roentgenology, the time spent because we had no such perfected technique of making diagnosis in these cases. By the time that we got them, as Dr. Frank says, they required some very big surgery indeed.

These growths may be attached to other organs, and it has been shown lately that these cases could and should be attacked with wide and extensive surgery. Of course, we hate to get them that way, but we have to take them as we find them. I have half a dozen cases at the hospital, all far advanced carcinomata, on which we have to do multiple operations. In cancer attached to the pancreas, I think we have better chances in attacking them than in metastases to the liver, where we can do nothing but palliative work. They are ultimately

cancer deaths, often following acute obstruction. But the pancreas can be handled by transposing the gall bladder over to the intestine or stomach and taking all the pancreas out. We formerly thought if we did anything to the pancreas we were lost. We ran into a cyst as big as your hat, but we did take it out and got away with it. Cancer surgery on the pancreas can be done by transferral of the pancreatic flow. It is done in stages: first, a gastroenterostomy; then building up of the patient; and finally, an attack of the growth. Cancer growths, as a rule, grow very slowly. If the operation is done in stages, there is a better chance of saving the patient.

M. J. Henry: In discussing the history of gastric carcinoma and gastric ulcer it is very important to bear in mind the location of the lesion, lesions in the cardiac, median, and pyloric portions give rise to symptoms according to the location of the lesion.

A well taken history is essential: gastric analysis gives no more than corroborative evidence; but roentgen examination is the most positive means of diagnosis. I doubt if there is a clinician who would have the temerity to make a diagnosis of gastric ulcer or gastric cancer in the face of a negative diagnosis by a competent roentgenologist.

The roentgen examination not only makes the diagnosis; it localizes the lesion, reveals its extent and often determines the question as to whether or not the lesion can be removed.

PROLAPSE OF THE SIGMOID DUE TO CARCINOMA
REPORT OF TWO CASES

M. H. Pulskamp, M. D., F.A.C.S.
Louisville

Prolapse of the rectum may be either complete or incomplete. The incomplete also called partial consists in a sagging down or protrusion of the mucous membrane of the rectum outside the anal orifice, while by a complete prolapse, or Procidentia Recti, we mean a prolapse in which all the coats of the bowel take part.

Complete prolapse is usually divided into three degrees: First, second, and third.

In the first degree, the prolapse begins at the margin of the anus, and its external surface is continuous with the skin surrounding the anal orifice.

In the second degree, the prolapse begins above the anal sphincter and descends through that portion of the bowel which remains in place and protrudes through the anal orifice.

In the third degree, the prolapse begins in the sigmond and extends down into the rectum, but as a rule, does not protrude through the anal orifice. It is really an intussusception of the sigmoid into the rectum.

The symptoms of third degree prolapse may be quite obscure. The patient may give a history of constipation alternating either with diarrhoea or regular bowel movements. There may be a bearing down feeling in the rectum after standing or walking. Pain may be severe especially when trying to relieve the bowels. There is often a variable amount of blood and mucus in the stools, and pain in the lower abdomen is also sometimes complained of. These symptoms may come on at intervals of months, weeks, or days.

To make the diagnosis, the patient must be examined during an attack or nothing will be found. During an attack, the prolapse can often be felt with the finger or the diagnosis can be made by proctoscopic examination.

Case I: F. S., White, female, age 54, was seen in the out-patient department of the General Hospital, her chief complaint being that she had protrusion from the rectum at intervals.

She stated that her trouble began about 5 months previous to the time she consulted us with bleeding (bright red) on defecation. Shortly after this, she noticed a prolapse from the rectum which would occur about every 7 to 10 days and last about 2 or 3 days. During these attacks, at every attempt at defecation, she was unable to pass anything but mucus and bright red blood. However, she was able to replace the mass into the rectum.

Digital examination at this time was negative while proctoscopic examination showed nothing other than that the mucosa was slightly redder than normal.

She was admitted to the hospital for observation.

Under Gas Oxygen anesthesia, a dry gauze sponge was inserted into the rectum and when withdrawing it, we were able to bring down a tumor mass, outside of the rectum. This mass about 8 by 10 cm. in diameter was friable, bled easily and appeared to be attached to the anterior portion of the bowel. A diagnosis of Carcinoma was made at this time, however, a biopsy was taken and the pathological examination verified the diagnosis.

Read before the Jefferson County Medical Society, December 16, 1942.

X-ray examination, with a barium enema, showed a filling defect with obstruction to the passage of barium in the lower sigmoid.

An exploratory laparotomy revealed a tumor mass in the lower sigmond (the middle portion containing the tumor having intussuscepted into the distal portion of the sigmoid.)

The sigmoid was quite redundant and was easily delivered through the abdominal incision. A first stage Mikulicz operation was done at this time.

Case II: A. J., white, female, age 50 was examined in the out-patient department of the Louisville General Hospital.

Her chief complaint was that she had pain in the left lower abdomen and bleeding with bowel movements.

Her trouble began about two months previously with a dull aching pain in the left lower abdomen. When the pain was most severe there was an urge for bowel movement and she would pass bright red blood with the movements. She had lost 15 pounds in weight.

On digital examination, a sessile tumor mass was felt about 3 inches above the anal orifice.

Proctoscopic examination showed a sessile tumor, about 2 by 4 cm., which was ulcerated and bled easily. This prolapse had the appearance of a cow's horn with the tumor at the distal end. A diagnosis of Carcinoma was made which was verified by the microscopic examination of the specimen taken with the biopsy forceps through the proctoscope.

The patient was referred for X-ray examination with a barium enema. The X-ray report stated: "The colon filled readily throughout. The barium passed immediately into the terminal ileum. There was a constant irregular annular filling defect in the sigmoid slightly tender to manipulation but not fixed in position. There was no particularly associated irritability of the colon. The appearance was that of a new growth, probably Carcinoma."

Digital and proctoscopic examination after the patient was admitted to the hospital failed to reveal the condition found at the time of the examination in the out-patient department.

At operation, the tumor mass shown by X-ray was found in the sigmoid colon. A Mikulicz operation was done.

Comment: Two cases of prolapse of the sigmoid into the rectum have been reported because of the infrequency in which they are encountered; both cases were verified at operation.

BOOK REVIEWS

THE MODERN ATTACK ON TUBERCULOSIS: By Henry D. Chadwick, M. D., Superintendent Westfield State Sanatorium, 1909-1929, Tuberculosis Controller of the City of Detroit, 1929-1933, Commissioner of Public Health of the Commonwealth of Massachusetts 1933-1938; Medical Director Middesex Tuberculosis Sanitarium, 1938-1941. Alton S. Pope, M. D., Chief, Bureau of Communicable Disease, Department of Health, Chicago, 1926-1929. Deputy Commissioner of Public Health and Director of the Division of Tuberculosis, Commonwealth of Massachusetts. The Commonwealth Fund, New York, Publishers. Price $1.00.

The authors discuss the current problems in tuberculosis control and the operation of an effective regional control program. Modern procedures are stressed, especially with regard to the discovery and control of the disease by age, sex, occupation, and within the family, and with regard to the function of the tuberculosis sanatorium.

Health officers, public health nurses, and others concerned with community health, as well as physicians with responsibilities to tuberculous patients will find this book a useful, brief, and authoritative discussion of ways and means to control and eventually to eradicate the disease.

THE CARE OF THE AGED (GERIATRICS) by Malford W. Thewlis, M. D., Attending Specialist, General Medicine, U. S. P. H. Hospitals, New York City, Attending Physician, South County Hospital, Wakefield, R. I., Special Consultant, Rhode Island Department of Public Health. Fourth Edition, Thoroughly Revised with 50 illustrations. The C. V. Mosby Company, St. Louis. Publishers.

This new fourth edition has been thoroughly revised to meet the increasing demand for knowledge of the care of the aged.

The whole subject is gaining in importance on account of the great shift in our living population, for today a much larger proportion of our population is alive over 60 than in the last century and geriatrics, a science dealing with the problem of advancing years, is rapidly becoming a needed specialty.

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ANNUAL MEETING LOUISVILLE
OCTOBER 4-6, 1943

COUNTY SOCIETY REPORTS

The Four County Medico-Dental Society: This society met in quarterly session on Tuesday night, February 23, 1943, Princeton, and following supper served at the Henrietta Hotel to nineteen members and visitors, W. S. Ehrich, of Evansville, discussed "Some Unusual Cases of Urinary Calculi," and W. R. Davidson, of Evansville, discussed "Diseases of the Stomach and Gall Bladder." Physicians in attendance, in addition to the essayists were: C. B. Walker, J. O. Nall, W. C. Haydon, T. L. Phillips, I. Z. Barber, J. D. Knapp, 1st Lt., M. C., Camp Breckinridge, E. N. Futrell, L. A. Crosby, T. Atchison Frazer, G. E. Hatcher, C. P. Moseley, Frank T. Linton, Capt. John Futrell, M. C., Camp Breckinridge, W. L. Cash. Dentists: B. L. Keeney, T. W. Lander and W. J. Gribble, druggist.

Officers for the current year were elected as follows: T. L. Phillips, Kuttawa, president, succeeding J. O. Nall; B. L. Keeney, Princeton, vice-president, succeeding T. W. Lander; W. L. Cash, Princeton, secretary, re-elected. The program committee, representing the four counties composing the Society as follows: T. Atchison Frazer, Marion, Crittenden County; C. P. Moseley, Eddyville, Lyon County; G. E. Hatcher, Cerulean, Trigg County; W. C. Haydon, Princeton, Caldwell County. The next meeting will be held in Marion, Crittenden County, on the fourth Tuesday night in May.

W. L. Cash, Secretary.

Hopkins: The Hopkins County Medical Society held its regular meeting at the First Methodist Church at 6 P. M., March 11, 1943. Dinner was served by members of the Susannah Wesley Class to the following members and guests: Drs. F. P. Strother, I. J. Townes, W. L. Moore, C. R. Morton, T. R. Finley, C. D. Draper, W. M. Hammack, R. F. Robinson, Wm. H. Garnier, J. R. Corum, A. F. Finley, M. S. Veal, J. E. Johnson of Nortonville, J. E. Taylor, A. W. Davis, J. D. Sory, W. L. Morse and C. B. Johnson of Earlington, and Mr. W. J. Hatchel.

A brief business meeting was held. Drs. Robinson and Corum were appointed to arrange a program for the next meeting.

W. H. Garnier, Secretary.

Jefferson: The 860th stated meeting of the Jefferson County Medical Society was held Monday evening, March 1, with 48 members and guests present. C. L. Dyer, who presided in the absence of B. W. Smock, called the meeting to order at 8:05 P. M.

The Secretary read the minutes of the previous meeting and they were accepted as read.

The Secretary read the announcement concerning the next regular staff meeting on March 4, of Nichols General Hospital, to which the members of this Society are invited. The subject, "Fracture of Skull and Intercranial Complications" will be presented by Col. S. C. Woldenberg, M. C. and will be discussed by Franklin Jelsma, Acting Clinical Professor of Neuro-Surgery, University of Louisville.

New members elected are Doctors Charles Leo Bloch and Thomas A. Coates.

Virgil Simpson spoke in tribute of the late C. C. Turner of Glasgow, and made a motion that the Necrology Committee be requested to prepare suitable resolutions on his death and that a copy be spread in the minutes, one to the State Association and one to his family. Motion seconded and passed.

SCIENTIFIC PROGRAM: 8:30 P. M.

Clinical X-ray Conference:

First Case presented by Sydney E. Johnson and Vincent Stabile, with questions and discussion by Doctors E. L. Shiflett, O. O. Miller and Harry M. Weeter.

Second Case presented by Charles C. McCoy and Emmet F. Horine with questions and discussion by Doctors M. J. Henry, Sydney Johnson and O. O. Miller.

Third Case presented by E. L. Shiflett and Charles F. Wood, with questions and discussion by Doctors V. Simpson and Sydney Johnson.

Adjourned 9:35 P. M.

Herman Mahaffey, Secretary

Shelby: The members of the Shelby County Medical Society met February 25th at Dr. Nash's office at 6:30 P. M. After a social session of half an hour Dr. Nash, the host of the evening, invited the members to the Colonial Inn where a delightful turkey dinner was served.

The following members were present: Drs. Bell, Dowden, Skaggs, Leslie, Carroll, Nash, Bland, Richeson, Hughes, McMurry, Furnish, Risk and H. B. Robertson of Lexington.

After the dinner President Bell called the meeting to order. The minutes of the previous meeting were read and approved.

The secretary read a letter from Mrs. A. D. Doak, the wife of Dr. Doak, a member of this society who is now serving with the Army in North Africa. The letter was ordered filed.

The secretary announced the next meeting of the Society would be held on March 25th at the Kings Daughters Hospital. A dinner will be served at 7 P. M. which will be followed by a program furnished by the superintendent.

At this time Dr. Bell turned the meeting over to Dr. Nash, the host of the evening, who introduced the speaker, H. B. Robertson of Lexington who spoke on Tropical Diseases and the Islands of the Pacific. The paper was discussed very freely and was very much enjoyed.

A motion was made to adjourn.

C. C. Risk, Secretary

Union: The Union County Medico-Dental Society met at Calvert's Restaurant on Tuesday, March 2, 1943 at 7 P. M. Following the meal, the minutes were read and approved. Dr. Underwood explained the reason the meeting was being held at Morganfield was because of a lack of facilities at Sturgis, Kentucky.

The speaker for the evening was Dr. E. Dargan Smith of Owensboro, Kentucky, who presented a very interesting discussion of "Appendiceal Peritonitis" with especial attention to Glycerine therapy. An interesting discussion followed with benefit to all present. Those present were: J. W. Conway, H. B. Stewart, G. B. Carr, C. B. Graves, Bruce Underwood, D. M. Sloan, Bob Clark, guest E. Dargan Smith.

There being no further business, meeting adjourned.

Bruce Underwood, Secretary

NEWS ITEMS

The American College of Surgeons at its recent regional meeting at Indianapolis was presided over by M. J. Henry, M. D., Louisville, as Governor of that district. Elmer L. Henderson, Chairman, Fifth Corps Area Committee, Procurement and Assignment Service, spoke at the luncheon for visiting physicians, surgeons and hospital representatives on the Increasing Individual Opportunity for Service in Relation to the War Program. Irvin Abell, M. D. is Chairman of the Board of Regents of the American College of Surgeons and is responsible for the three regional programs at St. Paul, Milwaukee and Indianapolis.

The Burroughs Wellcome & Company, No. 9 and 11, East Forty-First Street, New York City, have issued a little handbook on the Reichert Collection of Diagnostic Instruments and Techniques in Medicine which is at present on view as a loan exhibit in the Wellcome Exhibition Galleries, 11 East 41st Street, New York. This handbook presents an historic outline of the subject and gives a description of the instruments exhibited. The distribution of the Handbook is complimentary, but limited to members of the medical profession.

Dr. F. W. Rankin, Lexington, has been promoted to Brigadier-General and is stationed in Washington.

Dr. Paul Holbrook of Greenup is now in the Army and Dr. Virgil Skaggs of Russell, has been appointed Secretary of the Greenup County Medical Society.

James W. T. Fuller, Mayfield, son of the late George T. Fuller, a former member of the State Board of Health and Surgeon of the Fuller-Gilliam Hospital, was the attending physician to Captain Eddie Rickenbacker after his spectacular rescue.

BOOK REVIEWS

COLLECTED PAPERS OF THE MAYO CLINIC AND MAYO FOUNDATION, Edited by Richard M. Hewitt, B. A., M. A., M. D., A. B., Nevling, M. D., John C. Miner, B. A., Sc. D., James R. Eckman, A. B., and Katharine Smith, B. A. Volume XXXIII, 1941. Published May 1942. 1099 pages 6" x 9" illustrated. W. B. Saunders Company, Philadelphia, publishers. Price $11.50.

The Annual Mayo Clinic Volume provides one of the most valuable means available of keeping abreast of the new medicine and surgery. And the new volume is even more helpful than ever before because it covers dozens of subjects that, due to the war effort, are of special significance: Aviation Medicine, use of the Sulfonamides and of other new treatments, use of today's new Anesthetics, use of Diet, Vitamins, Nutrition Planning for National Defense and others too numerous to mention here, but none the less important to Practitioner, Surgeon and Specialist alike. Diseases and conditions of the alimentary tract, genitourinary system, ductless glands, blood and circulatory organs; of the head, trunk and extremities, chest, brain, spinal cord and nerves are taken up regionally as well as skin disorders and syphilis, radiology, physical medicine, anesthesia and gas therapy.

LABORATORY DIAGNOSIS OF PROTOZOAN DISEASES: By Charles Franklin Craig, M.D.,M.A. (Hon.), F.A.C.S.F.A.C.P., Col., U. S. Army (Retired), D.S.M. Emeritus Professor of Tropical Medicine in The Tulane University of Louisiana, New Orleans, Louisiana. Octavo, 349 pages, illustrated with 54 engravings and 4 colored plates. Cloth, $4.50, net. Lea & Febiger, Publishers, Philadelphia, Pa.

This work is a manual of laboratory methods to be employed in the diagnosis of diseases caused by protozoan organisms. These diseases, which are among the most important infections to which man is subject, are numerous and all of them are dependent upon laboratory methods for their accurate diagnosis. The author's experience covers forty years of intensive work in this field and his book fills a long felt need for a text devoted entirely to the methods available for the diagnosis of these diseases. He has assembled in a single volume many valuable procedures which have hitherto been hidden in the pages of medical journals, and which have never reached our textbooks on clinical diagnosis or our texts on bacteriology and parasitology. Even when they have appeared, they have been covered so briefly as to make their interpretation and application extremely difficult.

In this work the author has included all methods that have a real claim to value in the diagnosis of protozoan diseases. To them he has added his evaluation of their usefullness as judged from his own experience and that of others. The "Cretique of Diagnostic Methods" which follows each section suggests a scheme for a diagnostic procedure based on his own wide experience. Here is a book which should be of real value to physicians who conduct their own clinical laboratories, to public health officers and to laboratory technicians everywhere, upon whom falls the responsibility of preparing material necessary for the accurate diagnosis of protozoan diseases.

PHYSICIANS' REFERENCE BOOK OF EMERGENCY MEDICAL SERVICE, compiled, printed and distributed free as a public service to physicians and surgeons in the Emergency Medical Service of the U. S. by E. R. Squibb & Sons, New York.

This book has been prepared especially for the physicians and surgeons participating in civilian. defense work. It makes available a large amount of information concerning the manner in which ordinary civilian accident practice must be modified to deal with injuries resulting from the impact of modern warfare on the civilian population. Formerly much of this information was available only in large medical libraries and thus far removed from the daily rounds of thousands of physicians who wish to prepare themselves for the possible consequences of air raids.

SURGICAL PATHOLOGY: By William Boyd, M. D., LL.D.,M.R.C.P. Ed., F.R.C.P. Lond., Dipl. Psych., F.R.S.C., Professor of Pathology, University of Toronto. Fifth Edition, Thoroughly Revised. 843 pages with 502 illustrations and 16 colored plates. Philadelphia and London: W. B. Saunders Company, 1942. Price $10.00.

This new fifth edition has been completely revised including every chapter and a great deal of new material including entirely new chapters on the Thorax. 162 new illustrations have been added which makes it almost a complete new book.

WOMAN'S AUXILIARY PAGES

By courtesy of The Journal, following suspension of The Quarterly for The Duration

PRESIDENT'S MESSAGE

My dear Auxiliary Members:

The Mid-Year Executive Board Meeting was held at the Brown Hotel, in Louisville, on January 20, 1943. It was gratifying to see such a large attendance, all of whom were intensely interested in formulating a plan, whereby the Woman's Auxiliary could engage in a program of war work as a united organization.

It is true that most members of the Auxiliary are engaged in work essential to war conditions, in connection with other Organizations. It is not the intention of the "Doctors' Aide Corps" program to interfere with such arrangements. The idea is for the members of the Auxiliary, as a group connected with the Medical Societies, to select some project suitable to the needs of their respective counties, not now being done by the other organizations.

With this idea in view, the program of "Doctors' Aide Corps" was presented to the Executive Board at the Mid-Year Meeting. The plan originated with the Woman's Auxiliary, Fulton County Medical Society, Atlanta, Ga. The plan of work has the approval of the Advisory Councils of the American Medical Association, the Kentucky State Medical Association, and the Southern Medical Association.

A feasible plan for use in Kentucky is being considered at this time. When plans are formulated, they will be printed in the Woman's Auxiliary Pages of the Kentucky Medical Journal. Our Quarterly magazine, the Woman's Auxiliary Section of the Journal, has been suspended for the Duration.

When the outline of this plan is printed and copies sent to all County Presidents, I sincerely hope that all Auxiliaries will select a project suitable to the needs of their respective locations, for which they can work with unity and enthusiasm so that when these dark days become bright again, we can feel that we have kept the faith with the brave men and women who are out in the open fighting for us.

Woodrow Wilson said it in June, 1917. "The great fact that stands out above all the rest is that this is a people's war . . and with us rests the choice to break through all these hypocrisies and patent cheats and masks of brute force and help set the world free; or else, stand aside and let it be dominated a long age through sheer weight of arms and the arbitrary choices of self-constituted masters, by the nation which can maintain the biggest armies and the most irresistable armaments—a power to which the world has afforded no parallel and in the face of which political freedom must wither and perish."

This was said over twenty-five years ago. But it is true now in 1943.

Sincerely yours,

(Mrs. John B.) Barbara L. Floyd

DOCTORS DAY, APRIL THIRTEENTH

Doctors Day for 1943, April 13th, is almost here!

What is your program in honor of the members of the medical profession?

Our special recognition this year is given Dr. William McDowell, (1795-1853.) For a brief biographical sketch, see p. 63, Kentucky Medical Journal, February, 1943. Please write Mrs. B. J. Edwards, Corbin, our State Chairman, all about your observance of Doctors Day.

For the observance of the State Auxiliary, our Radio Chairman, Mrs. Jos. E. Wier, Louisville, has arranged two radio programs—one over WAVE and one over WHAS. Because of War demands on the radio, it is not possible to give you the exact time when going to press. However, the Chairman will notify each County President as early as possible.

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MINUTES
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MID-YEAR EXECUTIVE BOARD MEETING

The Mid-Year Executive Board Meeting of the Woman's Auxiliary to the Kentucky State Medical Association was held at the Brown Hotel, Louisville, at 11:30 A. M., Wednesday, January 20, 1943, with the President, Mrs. John B. Floyd, Richmond, presiding. A quorum was present. (15 seated)

The Invocation was offered by the President-Elect, Mrs. Octavus Dulaney.

The Minutes of the Post-Convention Board Meeting were read by the Secretary and approved as read.

The following reports were given:

OFFICERS:

First Vice-President—Mrs. Eleanor Hume Offutt, Frankfort.

Corresponding Secretary—Mrs. Hugh Mahaffey, Richmond.

Treasurer—Mrs. Luther Bach, Bellevue, reported by mail.

A motion by Mrs. Eleanor Hume Offutt, seconded by Mrs. A. T. McCormack, that a War Bond be purchased with $18.75 of the $26.61—if available—in the Refunding Certificate held by the Louisville Trust Company, carried.

COMMITTEE CHAIRMEN:

Doctors Day—Mrs. B. J. Edwards, Corbin, announced that Dr. William Adair McDowell, 1795-1853, early advocate of the curability and of the prevention of tuberculosis, has been selected for special honor this Doctors Day, April 13, 1943. (Brief biographical sketch in Kentucky Medical Journal, February, 1943, p. 63.)

Hygeia—Mrs. J. W. Sams—Louisville.

Legislation—Mrs. Eleanor Hume Offutt, Frankfort.

Radio—Mrs. Joseph E. Wier, Louisville.

Publicity—Mrs. Bernard Asman, Louisville.

Historian—Mrs. J. R. Shacklette, Jeffersontown.

Jane Todd Crawford—Mrs. A. T. McCormack, Louisville, who presented a multigraphed copy of Governor Johnson's Proclamation for Jane Todd Crawford Day, December 13, 1942, the first official observance of a day set apart in honor of our pioneer heroine of surgery. Through the sale of copies of the Special Issue of the Quarterly, October-November-December, 1942, it was possible to pay the author, George Madden Martin a check for Fifty Dollars, in November, for her remarkable manuscript, Jane Todd Crawford. Prospects are bright for the payment of a second check for Fifty Dollars at an early date. (Paid, January 28, 1943.)

THE QUARTERLY:

Editor:—Mrs. A. T. McCormack, announced

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that the Kentucky Medical Journal has generously invited the Quarterly (Woman's Auxiliary Section) to publish necessary Auxiliary material and Advertisements within the pages of the Journal, at a moderate cost, for the Duration. The publication of the Woman's Auxiliary Section has been suspended since the last issue of 1942.

Advertising Manager—Mrs. Joseph E. Wier, Louisville.

COUNTY REPORTS:

Daviess—Mrs. N. H. Burkhead, Owensboro.

Franklin—Mrs. John G. South, Frankfort, reported for the President unable to attend.

Jefferson—Mrs. O. H. Kelsall, Louisville.

Madison—Mrs. Shelby Carr, Richmond.

Whitley—Mrs. H. H. Triplett, Corbin.

Upon request from the President, Mrs. Eleanor Hume Offutt, Frankfort, presented a detailed outline of The Doctors Aide Corps adopted by the Executive Board of the American Medical Auxiliary, at the November Meeting in Chicago. This plan, developed in Atlanta by the Fulton County Medical Auxiliary, Georgia, was also presented to the Southern Medical Auxiliary in Annual Convention at Richmond, Virginia, November 11, 1942.

The President announced that the Advisory Councils of the American Medical Auxiliary, the Southern Medical Auxiliary and the Ken-



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tucky State Medical Auxiliary have all approved the plan.

Following considerable discussion, a motion by Mrs. A. T. McCormack, seconded by Mrs. Eleanor Hume Offutt, that the Kentucky State Medical Auxiliary adopt this plan, for developing Auxiliary Members as Doctors Aides, as outlined by the American Medical Auxiliary, carried.

The President appointed Mrs. John Glover South, Frankfort, as Chairman of the Doctors Aide Corps. Mrs. South asked for time to consider this appointment—which was granted.

The Secretary was requested to write a note expressing the interest of the Executive Board to Mrs. Samuel H. Flowers, a former Member of Middlesboro, now a new member of the W. A. A. C. and to Lieutenant Lucille Shacklette, formerly of Jeffersontown, now in Des Moines, Iowa, an early member of W. A. A. C.

Adjourned 1:30 P. M.

Respectfully submitted,

(Mrs. N. H.) Elsie D. Burkhead,
Recording Secretary

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* *Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154*
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Published Monthly by the Kentucky State Medical Association Under the Supervision of the Council

VOL. 41, NO. 5 BOWLING GREEN, KY. MAY, 1943

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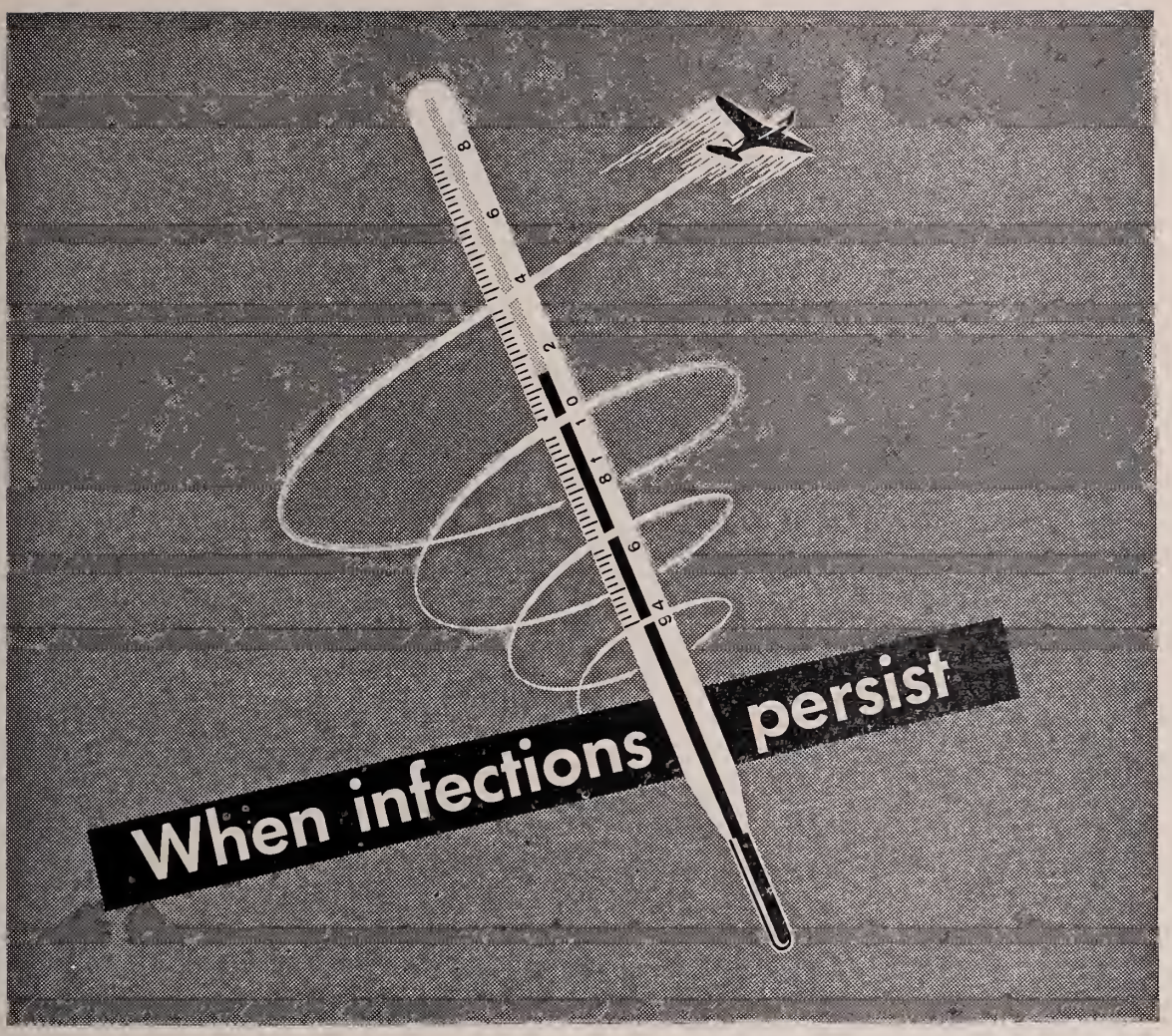
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CALENDAR OF COUNTY SOCIETY MEETINGS

COUNTY	SECRETARY	RESIDENCE	DATE
Adair	W. Todd Jefferies	Columbia	May 5
Allen	A. O. Miller	Scottsville	May 26
Anderson	J. B. Lyen	Lawrenceburg	May 3
Ballard	F. H. Russell	Wickliffe	
Barren	C. R. Markwood	Glasgow	May 19
Bath	H. S. Gilmore	Owingsville	May 10
Bell	Edward S. Wilson	Pineville	May 14
Boone	R. E. Ryle	Walton	May 19
Bourbon	George M. Jewell	Paris	May 20
Boyd	R. G. Culley	Ashland	May 4
Boyle	P. C. Sanders	Danville	May 18
Bracken-Pendleton	W. A. McKenney	Falmouth	May 27
Breathitt	M. E. Hoge	Jackson	May 18
Breckinridge	J. E. Kincheloe	Hardinsburg	
Bullitt	George B. Hill	Mt. Washington	
Butler	D. G. Miller, Jr.	Morgantown	May 5
Caldwell	W. L. Cash	Princeton	May 4
Calloway	J. A. Outland	Murray	
Campbell-Kenton	Robert L. Biltz	Newport	May 6
Carlisle	E. E. Smith	Bardwell	May 4
Carroll	H. Carl Boylen	Carrollton	
Carter	Don E. Wilder	Grayson	May 11
Casey	Wm. J. Sweeney	Liberty	May 27
Christian	H. B. Stone	Hopkinsville	May 18
Clark	W. Carl Grant	Winchester	May 21
Clay	L. H. Wagers	Manchester	
Clinton	S. F. Stephenson	Albany	May 15
Crittenden	C. G. Moreland	Marion	May 10
Cumberland	W. F. Owsley	Burkesville	May 5
Daviess	W. H. Parker	Owensboro	May 11 & 25
Estill	Virginia Wallace	Irvine	May 12
Fayette	Charles D. Cawood	Lexington	May 11
Fleming	Roy Orsburn	Flemingsburg	May 12
Floyd	Robert Sirkle	Weeksbury	May 26
Franklin	E. K. Martin	Frankfort	May 6
Fulton	John G. Samuels	Hickman	May 12
Gallatin	J. M. Stallard	Sparta	May 20
Garrard	J. E. Edwards	Lancaster	May 20
Grant	Wallace Byrd	Owenton	May 19
Graves	H. H. Hunt	Mayfield	May 4
Grayson	E. B. Deweese	Caneyville	
Green	S. J. Simmons	Greensburg	May 3
Greenup	Virgil Skaggs	Russell	May 14
Hancock	F. M. Griffin	Hawesville	May 3
Hardin	D. E. McClure	Elizabethtown	May 13
Harlan	W. R. Parks	Harlan	May 15
Harrison	W. B. Moore	Cynthiana	May 3
Hart	Maher Speevack	Munfordville	May 4
Henderson	Walter L. O'Nan	Henderson	May 10 & 24
Henry	Owen Carroll	New Castle	May 13
Hickman	H. E. Titsworth	Clinton	May 6
Hopkins	Wm. H. Garnier	Madisonville	May 13
Jefferson	Herman Mahaffey	Louisville	May 3 & 17
Jessamine	J. A. VanArsdall	Nicholasville	May 20
Johnson	A. D. Slone	Paintsville	May 24
Knox	T. R. Davies	Barbourville	May 20
Larue			
Laurel	Oscar D. Brock	London	May 12
Lawrence	L. S. Hayes	Louisa	May 17
Lee	A. B. Hoskins	Beattyville	May 8
Letcher	Bert C. Bach	Whitesburg	May 25
Lewis	Elwood Esham	Vanceburg	May 17
Lincoln	Lewis J. Jones	Hustonville	May 21
Livingston	T. L. Radcliffe	Smithland	
Logan	E. M. Thompson	Russellville	
Lyon	H. H. Woodson	Eddyville	May 4
McCracken	Leon Higdon	Paducah	May 26
McCreary	R. M. Smith	Stearns	May 3
McLean	F. L. Johnson	Livermore	May 13
Madison	Max E. Blue	Richmond	May 20
Magoffin	Lloyd M. Hall	Salyersville	
Marion	Nelson D. Widmer	Lebanon	May 25
Marshall	S. L. Henson	Benton	May 19

COUNTY	SECRETARY	RESIDENCE	DATE
Mason	C. W. Christine	Maysville	May 12
Meade	S. H. Stith	Brandenburg	May 27
Menifee	E. T. Riley	Frenchburg	
Mercer	J. Tom Price	Harrodsburg	May 11
Metcalfe	E. S. Dunham	Edmonton	
Monroe	Geo. E. Bushong	Tompkinsville	
Montgomery	John M. Prewitt	Mt. Sterling	May 11
Morgan			
Muhlenberg	Claude Wilson	Greenville	May 11
Nelson	Keith Crume	Bardstown	
Nicholas	T. P. Scott	Carlisle	May 17
Ohio	Oscar Allen	McHenry	May 5
Owen	K. S. McBee	Owenton	May 6
Owsley	W. H. Gibsou	Booneville	May 3
Perry	Lewis C. Coleman	Hazard	May 10
Pike	S. B. Casebolt	Pikeville	May 6
Powell	I. W. Johnson	Stanton	May 3
Pulaski	Rohert G. Richardson	Somerset	May 13
Robertson	Logan T. Lanham	Mt. Olivet	
Rockcastle	Robert G. Wehh	Livingston	May 7
Rowan			May 10
Russell	J. R. Popplewell	Jamestown	May 10
Scott	A. F. Smith	Georgetown	May 6
Shelby	C. C. Risk	Shelbyville	May 20
Simpson	N. C. Witt	Franklin	May 11
Spencer	M. H. Skaggs	Taylorsville	
Taylor	L. S. Hall	Campbellsville	May 6
Todd	B. E. Boone, Jr.	Elkton	May 5
Trigg	Elias Futrell	Cadiz	
Union	E. Bruce Underwood	Morganfield	May 4
Warren-Edmonson	John H. Blackburn	Bowling Green	May 12
Washington	J. H. Hopper	Willisburg	May 19
Wayne	Frank L. Duncan	Monticello	
Webster	C. M. Smith	Dixon	May 28
Whitley	C. A. Moss	Williamsburg	May 6
Wolfe	John L. Cox	Campton	May 3
Woodford	George H. Gregory	Versailles	May 6

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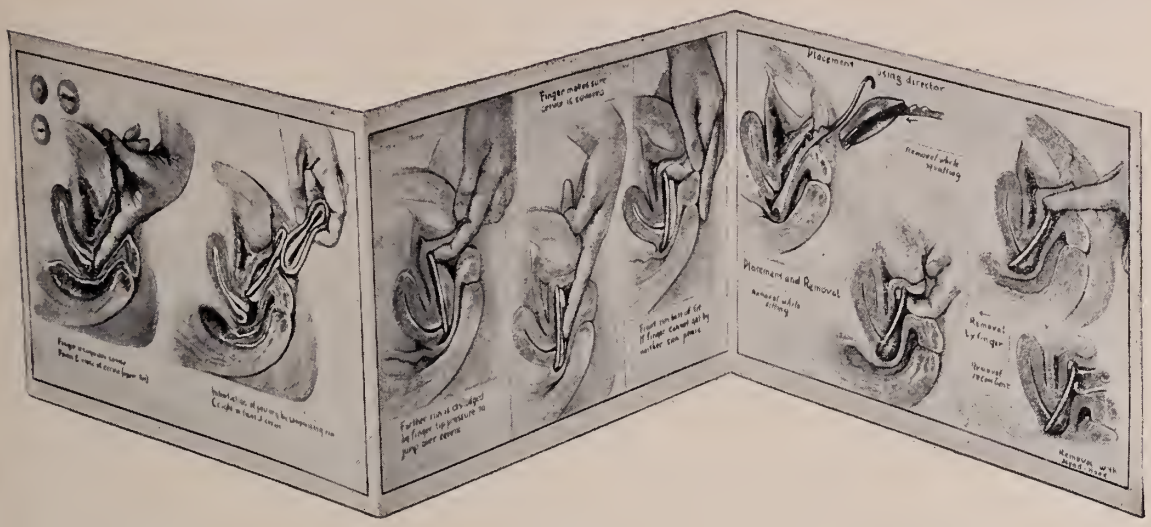
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KENTUCKY MEDICAL JOURNAL

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

VOL. 41, NO. 5 BOWLING GREEN, KY. MAY, 1943

OUR ANNUAL MEETING

The Annual Meeting of the Association will be held at the Brown Hotel, October 4, 5 and 6. The House of Delegates will convene on Monday, October 4 and the afternoon of the 6th. The Scientific Sessions will be on Tuesday and Wednesday, the 5th and 6th.

The Council has selected Dr. Oscar O. Miller, one of its Vice Presidents, as Chairman of the Committee on Scientific Work to arrange the program. Dr. Miller has selected Drs. Harry M. Weeter, Frederick Speidel and E. L. Henderson as members of the Committee, and Dr. A. T. McCormack, the Secretary of the Association, will be ex-offico. Dr. Miller will be happy to receive suggestion for the program from any member of the Association.

It is important for those who expect to attend to write as soon as possible to the Brown Hotel for reservations. On account of the congestion at the hotel, members are urged to make reservations for rooms to be occupied by two or four persons. There will be practically no single rooms available. Reservations should be made at the earliest possible moment.

POINTS TO PLAN FOR EXTENDING OUR HEALTH SERVICES

The April 1st issue of the Journal of the American Medical Association contains an editorial under the title "POINTS TO PLAN FOR EXTENDING OUR PUBLIC HEALTH SERVICES," which is so pertinent and will be of such interest to the physicians and people of Kentucky that we are reproducing it in full.

It will be noted that the proposed legislation in Illinois is adopted from the legislation which was adopted by the General Assembly in Kentucky in 1918, under the leadership of the Kentucky State Medical Association.

"Forty million of our people live in communities or in areas in which there is no access to the full time services of a professionally trained medical officer of health and the associated sanitarians and public health nurses of a local health department of civil government. On June 10, 1942 the House of Delegates of the American Medical Association unanimously voted its approval of extension of such services. Now the Committee on Administrative Practice, one of the standing committees of the American Public Health Association, has offered a plan to improve the situation.

"Tax supported public health services have been distributed unevenly and not in all respects in relation to sanitary needs or in proportion to the population units of local government. In fact, there are conditions of local government, cities, townships and counties, in which duplicating and to some extent conflicting health services are provided because of local rivalries of a political nature. State laws in some instances do not authorize cooperative arrangements for a single health officer for adjacent communities or counties. Good health service for prevention of communicable, occupational, nutritional and other preventable diseases, and for the protection of the health of mothers and children, cannot be achieved for a state solely or effectively or economically by a state department of health unless the counties and cities are sufficiently concerned with local health conditions to support their own community health services. By the same token federal programs for a higher level of national health fail in effectiveness for lack of facilities of local government through which federal grants can be used by agreement with the state.

In July 1942 some 62 million people living in the continental United States were provided by local governments with full time medically officered health protection. In addition 16½ million persons were served by county or district health departments operated by a state department of health, and about 12 million more people living in cities with full time health services. There remain 41,052,600 persons, or 31 per cent of our population, in 1,687 counties in 41 states for whom no full time

health service is provided by either local or state government.

"The committee of the American Public Health Association presents a half dozen basic principles of health administration and suggests that not more than 1,127 units of local health jurisdiction are needed for the total coverage of the continental United States. The units are,of course, in addition to the respective state departments of health and the health services of the various bureaus and departments of the federal government. It is to be assumed that a city and the county within which it is located shall have a single headed health service. It is suggested that a unit of less than 50,000 population can rarely maintain an efficient tax supported local health service and that counties with small populations should be authorized by state law to combine with adjacent counties to support and be served by a single district or multicounty health department.

"Among the 3,070 counties of our states there are many with populations so small and economic resources so slender as to preclude the possibility of supporting even the minimum personnel and functions of a local health department. The basic public health law of each state should not only permit but specifically authorize the creation of local health units of population size and area compatible with efficient and economical public service. The law should provide furthermore for the selection of professional personnel on a sound civil service or merit system and authorize the levying of taxes to support the health services.

"The American Public Health Association, through its Subcommittee on State Health Administration, has recently completed a study of state health administration in Illinois, undertaken at the request of the state director of public health with the approval of the governor. A summarized report of this study discloses a recommendation that legislation be enacted to permit the establishment of full time county or combination of county health departments. Following a distribution of this report, the Research Department of the Illinois Legislative Council made available a factual study of county health departments in the state for use by the general assembly in considering any legislation that might be proposed. Now a bill has been introduced by Senator Searcy, as S. 244, authorizing the establishment and maintenance of county and multiple county health departments in the state.

"Permissive in form, this legislation proposes that county full time health departments may be created either by resolution of a county board or by the voters of a county and that multiple county health departments may be set up. If four or more counties wish to associate themselves in establishing and maintaining such a department, prior approval must be obtained from the state department of public health. Provision is made for the levying of a special tax not to exceed 1 mill on the dollar on all taxable property in the county or counties involved to finance the operation of the department. Existing full time health departments in cities, villages or public health districts with less than 500,000 inhabitants may be retained or they may be abandoned and become integrated in the county or multiple county health departments. Health departments in communities with a population of 500,000 or over will apparently not be affected by the bill. Each county health department will be managed by a local board of health appointed by the president or chairman of the county board. At least two members must be physicians licensed in Illinois to practice the healing art in all its branches and at least one member must be a dentist licensed in Illinois. All members must be chosen for their special fitness for membership on the board. Multiple health departments are to be managed by a board of health consisting of three members appointed from each county by the president or chairman of the county board.

"Provision is made for the appointment of medical, dental and nonmedical advisory committees and for the appointment, for each department, of a chief medical officer to act as executive officer, and of such other officers and employees as may be approved by the executive officer, all appointees to meet the qualifications prescribed by the Illinois State Civil Service Commission. The functions to be exercised by the departments are set forth in broad groupings, including the right to pass such rules as may be necessary for the improvement and protection of the public health. The people of Illinois may well reflect on the importance of this proposal, establishing as it does a framework on which may be constructed a comprehensive public health program to function in the interest of the health of all the people of the state. Legislation with a similar objective, although differing in detail and

approach, was proposed this year in the states of Arkansas, Georgia. North Dakota, Utah, Washington and Wyoming.

"Each state medical society may with advantage avail itself of the detailed information in the hands of the American Public Health Association and analyze its own situation in conference with its own state health officer. Permissive or enabling legislation to provide for local health units and their support should be supported by the professional influence of the physicians of the state, unless existing laws are adequate.

"The career of public health as a specialty of medicine requiring graduate university training and practical experience is so far accepted as part of the pattern of preventive medicine that the survival of the part time general practitioner as the local administrator of a health department cannot be encouraged by the medical profession or be recommended to the taxpayer as the best his money can buy in public health."

EXTENSION COURSE

D. Y. Keith, M. D., Chairman of the Extension Course of the Kentucky State Medical Association is sponsoring very interesting district meetings to be held during the coming summer. The meetings will begin at 4 P. M. and the dinner will be held from 6 P. M. to 7 P. M. and discussions continued to 9 P. M. It is planned to have on the programs physicians who are authorities on their respective subjects. Places and dates of these meetings will be announced from time to time in the Journal and in each instance personal letters will be sent to physicians in each district announcing places and dates. The first of these meetings will be held at Corbin on consecutive Thursdays, beginning May 6, and continuing through May 13, May 20 and May 27th.

The programs at the Corbin meetings will include: J. B. Floyd, M. D. who will discuss "Unrecognized Tuberculosis and X-ray Findings"; W. E. Doyle, M. D., who will talk on "Industrial Hygiene", "Studies of Health Hazards in Industry", "Illness and Absenteeism" and "Industrial Hygiene Administration"; Percy Pelouze, M. D. Assistant Professor of Urology, University of Pennsylvania, whose subjects will be "Gonorrhea" and "Syphilis"; Milton Wilder, M. D., Resident, Kosair Crippled Children's Hospital, who will discuss "The Kenny Treatment"; J. Garland Sherrill, M. D., who will discuss "Blood Banks," "Traumatic Injuries to the Viscera,,' and "Fractures"; John Kooser, M. D., whose subject will be "Deficiency Diseases"; Alice Chenoweth, M. D., whose subjects will be "Prematurity" and "Neonatal Care"; H. H. Caffee, M.D., will discuss "Obstetrical Procedures"; Paul Turner, M. D., on "Surgery of the Tuberculous" and Oscar Miller, M. D., on "Home Care of the Tuberculous."

Every physician in the 11th District is cordially invited to attend and take part in the open discussions which will follow each meeting.

THE ITINERARY OF DR. P. S. PELOUZE

During the month of May the medical profession of Kentucky will have the privilege of a visit from Dr. Percy S. Pelouze, a consultant to the United States Public Health Service, formerly Assistant Professor of Urology, University of Pennsylvania and one of America's foremost authorities on the management and treatment of gonorrhea. He will address the following county societies and every physician should make an effort to attend one of these meetings and extend to this distinguished guest a hearty welcome and take the advantage of the opportunity to get the latest authoritative information on this disease.

May 3, Jefferson County Medical Society, Louisville.

May 5, Bell and Harlan County Medical Societies, Harlan.

May 6, Whitley County Medical Society, Corbin.

May 7, Pike County Medical Society, Pikeville.

May 11, Fayette County Medical Society, Lexington.

May 13, Hardin County Medical Society, Elizabethtown.

May 17, Kenton County Medical Society, Covington.

May 19, Boyd County Medical Society, Ashland.

May 20, Shelby County Medical Society, Shelbyville.

May 25, Henderson County Medical Society, Henderson.

May 26, McCracken County Medical Society, Paducah.

May 27, Christian County Medical Society, Hopkinsville.

ORIGINAL ARTICLES

MILITARY SYMPOSIUM

MEDICAL RESEARCH IN THE NAVY

Rear Admiral H. W. Smith
Medical Corps, U. S. Navy
Washington, D. C.

I have chosen to speak of medical research in the Navy, perhaps in part because that is the work in which I am engaged but chiefly because I felt sure that you would be interested in hearing a report of what there is to be done and what is being accomplished.

I was the more confident of your interest inasmuch as research in the Navy is bound up with broad national programs which will serve us beyond the tumultuous present. For while current investigation has as its immediate purpose making useful contribution to our war effort whether in promoting military effectiveness, in strengthening our home front, or in reclaiming the casualties of war, it holds also full promise of adding immeasurably to our understanding of the needs of the human body, its responses to environment, injury and disease, and means of influencing its resistance and recuperative powers.

Since such understanding as a means to human welfare has been an eternal quest of mankind, the specific problems posed have long been recognized. But to a large extent, we have allowed them to lie dormant. We have continued to yield our annual toll in death and disability, comfortably reassured by the tremendous advances of the last century that fuller knowledge would be ours in due time. Then the war came under the biting stimulus of a struggle for survival, research in both the science and art of medicine is being speeded up at a pace hitherto unknown to us.

Before enumerating our problems, let me first describe briefly the governmental agencies through which medical research is directed and supported.

As long ago as 1863, President Lincoln approved the charter of a National Academy of Sciences which was to act as an official advisory body to the Government on all matters related to the sciences. In 1916, the charter was implemented by the establishment of the National Research Council.

The Medical Sciences Division of the Council currently comprises about forty-two committees and subcommittees, representing the main branches of medicine, its principal specialties, and certain especially important subjects such as shock and blood substitutes.

In conferences and meetings, needs are considered, information weighed, projects formulated, and proposals for research recommended to the Committee of Medical Research, a branch of the Office of Scientific Research and Development under the Office of Emergency Management which finances approved projects with funds appropriated by Congress. The Armed Services are represented on all committees and maintain cognizance of all proceedings and developments. To date, about 375 contracts for projects have been let through the Committee on Medical Research to 81 universities, laboratories and individual investigators.

Such are the auspices under which broad research is conducted. The objectives of the Navy, on the contrary, are more limited. Naval Medicine is frequently spoken of as being itself a specialty. This is a misnomer, for it embraces every form of specialist practice. Even in the case of activities aboard ship and in the field, the principles and practices of universal medicine are followed. Naval Medicine then is medicine differing from civilian practice only as required by the peculiar field of application.

A practical distinction, however, is that civilian medicine has for its primary purpose the welfare of the patient, whereas military medicine has as its mission the conservation of military strength. But here also the difference is more apparent than real inasmuch as in civil practice consideration for the patient has on occasion to yield place of the social good, as in case of contagious disease.

Few will deny that regard for the good of the aggregate is a superior loyalty, and one which needs no sophistry to justify it. For that reason, the prime motive of medico-military research is to improve resources and increase knowledge to the end that there shall be no avoidable loss of personnel or diminution in its effectiveness.

The truly scientific approach to accomplishment of that mission, deliberate, planned inquiry directed toward the elucidation of each problem, has not been as fruitful as we would have wished. And since such an approach involves the physiology

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of cells and complex mechanisms, it gives no assurance of yielding useful data in the immediate future. In the meanwhile, progress is proceeding, but by ancient methods. Suggestions and "ideas" come from many sources. The ideas are tried. Those that prove good are talked about, are used by a widening circle, and presently they become established practice. Up to the present, that is the principal manner by which progress is being effected. The Navy is complementing such spontaneous progress by applied research directed by validating, standardizing, and extending the ideas thus evolved.

Aviation: The emergence of aviation as a major arm is the spectacular feature of this war. Gaining superiority in the air is become indispensable to success in operations, and our efforts to gain superiority is dependent upon medicine.

We are familiar with the pictorialization of evolution,—of life emerging from the primordial ooze and taking unto itself legs and lungs, fur and feathers, and—particularly—an impervious covering such as would continue unchanged in a new environment the salt-water medium in which living matter took its start. We are familiar too with the reenactment of those evolutionary stages in the developing embryo.

Well, aviation is pursuing a similar sequence in endeavoring to conduct sustained operations at progressively greater elevations. Aviators are being given new locomotory powers; they are being clad in a covering which insulates them from temperature changes; they are furnished a supplementary respiratory apparatus designed to conserve the complex functioning of that salt-colloid medium we term the blood.

In short, the body in being translated from one environmental stratum to another of quite different characteristics requires devices and expedients calculated to maintain approximately the atmospheric conditions prevailing in its normal habitat.

The tactical objectives leading to effort to scale ever greater heights are simple. As a means of escaping detection, and of avoiding damage from both ground and aerial defenses, the heavy artillery of the air is being flown at higher and higher levels; i.e., at elevations beyond the effective range of ground weapons and also beyond the range of fighter planes as currently constructed and equipped. Thus, insofar as the bomber alone is able to operate at extreme elevation, it is immune from attack. The obvious countermeasure is to turn out pursuit planes equipped to operate at levels above those attainable by bombers.

In this way, a see-saw struggle for altitude has been initiated. So that while with planes as with ships such characteristics as power, speed, armor and armament are being mutually adjusted in new construction according to the employment for which the plane is intended, it may be said that the struggle for air supremacy has narrowed down to a race to extend altitude limits. Engines will carry planes to rarefield strata; bomb sights are so perfected that accurate placement is possible from great elevations. In the contest, the aviator—the physiologic mechanism—is the chief factor conditioning success. In measure as medical research in one country or another can devise means of extending altitude limits, that country can have air supremacy. Hence, the outcome of the war in Europe: indeed, the future complexion of our world hinges principally on the efforts of the medical profession.

Now what are the specific problems and ensuing tasks facing medicine in relation to the new environmental conditions incidental to altitude?

Oxygen and Ambient Pressure: The first great change in environment imposed on an animal organism at any elevation above say 10,000 feet is the lack of oxygen. At greater elevations, supplying oxygen is necessary. Consequently, much research is being directed to selecting personnel resistant to hypoxia, to measures for increasing tolerance for altitude, to sources of oxygen, to supplying it to the aviator by apparatus which shall operate without fail and economically at the extremely low temperatures prevailing in the upper strata, and finally to making oxygen available in emergency when the pilot must drop with his parachute through 30,000 feet of cold air too rarefied to support life.

Unfortunately, supplying pure oxygen is not a wholly adequate measure, 44,000 feet being considered the absolute limit beyond which life can be maintained only by supplying another element of normal environment, atmospheric pressure. That is a task for the engineer, the pilot, and the physician, working in collaboration on the development of pressure-breathing

apparatus, pressurized suits, and pressurized cabins. The answer has not been found.

Another task for conjoined effort is the development of a mask which shall have a seal-fit, be comfortable, be ventilated, permit full vision, supply oxygen, and contain a microphone.

Decompression: "Decompression sickness" is a modern name for a disorder familiar to you as "caisson disease." That is, the "bends" experienced by the diver in rising from depths to the surface are essentially the same as the aeroembolism suffered by the aviator in rising from sea levels to high altitudes. In each case, the symptoms are due principally to the effect of low barometric pressures in causing the liberation of gases from the tissues and fluids of the body.

While there do form visible bubbles which act mechanically to obstruct circulation, perhaps in vital organs, there is also an antecedent state characterized by an acute and chronic symptomatology. The nature of pre-embolic changes is obscure; but something is being done toward preventing them by grounding of susceptible personnel; by elimination of nitrogen from the body by preoxygenation; and by study to determine factors within the body predisposing to occurrence of disorder.

Anti-G Measures: When a dive bomber hurtling downward at a speed of four, five, six hundred miles per hour reaches the low-point of his descent and noses sharply upward, or when a steep bank is taken at high speed, both plane and man are subjected to a terrific strain. Measured in units of gravity, the centrifugal force may amount to six or seven "G": that is, for several seconds the pilot weighs 1000 pounds or more. Under the pull, hernial protrusions break out, prolapse of the rectum occurs, veins rupture, and backs are wrenched. The blood, heavy as molten lead, gravitates toward the extremities, and for a matter of seconds the vasomoter system is quite unable to effect compensatory adjustments. Circulation is arrested, and there ensues syncope from acute cerebral anemia, what the aviator knows as "black-out."

This is the one field in which medicine is ahead of engineering. With the aid of huge "human" centrifuges, there have been developed devices which fortify the pilot against degrees of G-stress far beyond the structural strength of planes.

By means of automatically operated pumps and valves, serving a specially constructed suit enclosing the body and extremities, it is possible to create external supporting pressures, proportional to the G-stress but graduated in degree from the lower extremities upward. A refinement consists in feeding oscillating pressure in such fashion as to massage the limbs, thus maintaining circulation during the dive.

Low Temperatures: Besides protecting the pilot from the occasionally experienced effects of decompression and multiples of gravity, we must insulate him from extreme cold.

Great improvement in light-weight, flexible clothing for shielding the body from both still cold and wind has been brought about by studies relating to materials, yarns and weaves; but the requirements created by rapid translation through a temperature range of 200° F. can apparently be met only by tapping external sources of heat. While it is possible to circulate within an impervious suit heated air drawn from the power assembly a more practical equipment is the electrically heated suit. This, although it still has drawbacks, has been developed to the point that a pilot can fly in an open-cabin job when atmospheric temperatures approach 90° F. below zero.

Visual Problems: There are two general types of visual problems: first, methods for testing the individual for purposes of selection, classification and maintenance; second, control of instrumental design and operating conditions to provide maximum visual efficiency.

Depth Perception is under study, but without enthusiasm since curiously it appears that there is very little connection between depth perception and ability to make sure landings.

Dark Adaptation, the power to adapt quickly and completely to low visability, is extremely important for night raiders, men going on night watch, and submarine lookouts. Since it does not vary significantly among normal individuals, the adaptometer is being developed more as a means of testing men and the effectiveness of methods devised to shorten the time required for an individual, on emerging from a lighted compartment, to gain full night vision.

Inasmuch as the light rays prevailing at night lie near the blue end of the spectrum, the color of illuminant used in com-

partments is pure red, and the full sensitivity of the eye to blue is thus preserved as if by perfect darkness. On the same principle, red goggles may be worn, the individual in that case being able to move about and read by ordinary illumination and yet on going out into the night enjoy the maximum possible vision in three minutes instead of thirty. These matters have ceased to be wholly subjects of research; they are accomplishments.

An extension of this same problem of night vision is to protect the adapted night observer from loss of adaptation by exposure to uncontrollable sources of light, illuminated instrument gauges and the dazzle of search lights, exploding shells, discharges of guns, and tracer bullets. For military reasons, I cannot go further into this matter.

Motion Sickness: Notwithstanding the long experience of the Navy sea-sickness and more recent acquaintance with plane and glider sickness, we cannot report any material advance in control of this incapacitating disorder. The possible causes commonly listed number at least twenty, including such diverse influences as abnormalities of vision and hearing, external conditions, and suggestion. There is no satisfactory remedy known.

Stimulation of the Individual: A major phase of aviation medicine is means of enhancing the efficiency and endurance of the individual through employment of drugs, hormones, and special foods. Obviously, diet should be adequate. Beyond that, little can be said except that the highest pitch of efficiency is to be sought through psychosomatic health, not through drugging.

Paratroops: Air transport, involving as it does the use of gliders and parachutes, creates special problems requiring appropriate training of the medical personnel who accompany the paratroops wherever they go. The problems are of the same general type as those presented by service in self-propelled craft, but are distinguished by the prevalence of motion sickness, the psychology of mass descents, the specialized equipment required, and the skeletal injuries commonly sustained in landing.

Pilot Fatigue: Fatigue, like shock, is a make-shift term for a condition the nature of which is obscure. We know it must be basically psychogenic, and that its onset and severity are influenced greatly by contributory factors such as lack of sleep, overexertion, cold, heat, hypoxia, visual strain, noise, vibration and emotional tensions. We know that the mechanisms involved in "fatigue" may find other expressions such as neurosis or gastric ulcer. We know further that nearly 75% of all flying accidents result from impairment of judgment or skill due to fatigue; and doubtless the same figures obtain in combat casualties. We have learned that, barring accident or enemy agency, every pilot will break down when the stresses have been sufficiently severe and prolonged.

But we remain so ignorant of its nature that our only remedy is to interrupt as far as possible exposure to strain by frequent periods of rest and recreation, a measure which serves only to postpone the inevitable hour.

In the meanwhile, we are studying this fatigue among aviation and submarine personnel trusting that we may find means of preventing or at least alleviating an extraordinary drain on our combat strength.

Blast: Not all our problems spring from aviation. The blast emanating from bombs exploding in the air has proved singularly harmless, ensuing injuries being caused almost entirely by flying missiles or by the person himself being hurled against an object. On the other hand, the effect of under-water blast on men in the water is truly damaging, if not immediately fatal. It is a terrible sight; men swimming, perhaps in a sea covered with flaming fuel oil, a bomb explodes, a torpedo or a depth charge. When the flurry subsides, the bobbing heads have all disappeared. The force of the explosion has killed them instantly, from injury to the lungs, we know.

We have studied experimentally the physics of under-water concussion together with its physiological effects; and we have, we believe, evolved means of enabling men in water to withstand the impact of all blasts except those of the greatest magnitude.

Air blast, while itself innocuous, may as I have said give rise to damage. And I beg here to pay tribute to a surgeon on the Lexington. His battle dressing station struck by a bomb, he suffered fracture of a shoulder, fracture of both ankles and numerous wounds. Without pause, he herded his patients to an improvised station, continued to care for them and refused to abandon ship until the last patient had gone safely over the side. And

to the Captain who, eviscerated by fragments, stuck to his post on the bridge giving orders until he died. It is the fortitude of such men that urges us to compassionate research.

Chemical Warfare: "There is nothing new under the sun." Smokes have been used since long before history. The Spartans besieged Athens with sulphur dioxide in the 4th century, B. C. Fumes were commonly employed in the Middle Ages; and since the First World War chemical warfare has been an established branch of all Army forces. Gas has been used little in this war, its use having been reported authentically only in China; but it remains a poised menace.

Defense against chemical warfare is currently the subject of active investigation here and abroad, but nothing can be divulged as to what is being accomplished.

Similarly, disclosures regarding biological warfare must be withheld. It can be said, however, that, like gas, it has been visited on long-suffering China, and that our research agencies are on the alert to provide protection to our country from this inhuman weapon.

Tanks: In the general plan of advance overseas by seizure of successive bases, the Navy transports forces and supplies and lands naval troops and Marines to effect occupation. The Marines also frequently operate as a unit in conjunction with the Army. For all such operations in these days, there must be tanks; and those tanks must be transported, manned, landed, and operated. Thus the Navy has responsibilities in connection with these battleships of the land, and they present an array of medical problems relating to fatigue, vision, noxious fumes, heat, and nutrition. Most of the research involved is being carried on at Ft. Knox, and carried on with most creditable thoroughness.

Submarines: When, during the first World War, the submarine established itself as an essential arm of sea-power, it was quickly perceived that here was another instance in which the range of operations was limited, as in the case of the aeroplane, by the requirements of human physiology. Picture the conditions obtaining on an under-seas craft in the Tropics; excessive crowding, high temperature, sleepless nights, extreme humidity, the decks awash with sweat, canned food, no glimpse of the sun, all this for two months on end.

To these physical discomforts are to be added the effect of an abnormal mode of life and of constant strain, for it must be remembered that the submarine is the hunted as often as it is the hunter. It is the object of relentless search by surface craft, planes and other submarines; there are listening devices all about to detect the slightest sound which might indicate its presence and being systematically depth-bombed is nonetheless harrowing for being a daily experience.

Under such conditions, morale sags; but to the credit of our men be it said that nothing revitalizes a tired crew like a successful offensive. It has been said aptly and truly that sinking an enemy ship does more for a crew than a ton of vitamins.

Probably because an effect of saturation with moisture is to keep the air washed free of particulate bodies and because bacteria adhere to the wet surfaces, there is virtually no communicable disease notwithstanding indescribable crowding and the problems which demand attention are three in number: providing air-conditioning, to make atmospheric conditions tolerable, alleviating that complex termed "fatigue" and compensating for nutritive deficiencies, especially loss of salt and water-soluble vitamins eliminated in the sweat. In fact, the sweat of submarine crews in the Tropics is a highly vitaminous fluid.

In this field, we have not been idle. More and more have living conditions been improved until now the factors terminating a submarine patrol are more likely to be failure of material than exhaustion of personnel.

I have dwelt at some length on medical research in relation to aviation. Naturally, the pressing problems created by the emergence of a new arm and its spectacular rise to primacy have engaged our interest,—perhaps too much so; for I have often thought that in our efforts to keep the aviator aloft we may have neglected measures to keep the foot soldier above ground.

For it is still true that the ancient solvents of manpower, respiratory infections, malaria, Rickettsial diseases, cholera, and plague, can determine the issue of conflict as well as anoxia, fatigue, and defective night vision.

Such communicable and exotic diseases being familiar to you, as are also shock, burns, wounds and hemorrhage, I would say only that there is in progress in those

fields much work that is promising and much that has already proved highly productive.

Nutrition in its general aspects is of little concern to us since we feel sure that the Navy ration is adequate in respect to calories, constituent parts and palatability. But we are anxious to learn specific requirements under widely varying conditions, heat and cold, rest and work, in desert and in moist Tropics, with water and without, in planes and in submarines. We want further to know the lowest requirements for emergencies and patrols, for commandos and shipwrecked crews, and whether the crippling disability termed "immersion foot" represents a nutritive deficiency.

Physical Fitness: In reviewing the scope and aims of current medical research, I have dwelt almost exclusively on how man's powers may be conserved and extended by the aid of extrinsic agencies, mechanical, physical or biological. I cannot close without mentioning what is being done to bring man himself to his highest level of health and sustained efficiency.

To this end, there are four programs in operation:

1. That to develop recruits, and to instill early the habit of physical fitness.
2. That for older men design to maintain fitness.
3. That to speed recuperation of men fatigued by arduous duty on destroyers, in submarines, or in air operations.
4. That established at our Pre-Flight Schools in four universities for building up 30,000 men annually to meet the severe physical and mental stresses imposed by aviation duty.

An aim of these programs, however, extends beyond fitting men for combat duty. It is to spread the doctrine of bodily efficiency, clean living, self-confidence, and health which shall be lasting. To the accomplishment of this aim, the medical officer is contributing by studying physical fitness, to learn what it is, how it may be appraised, how it may be promoted, and how it may be conserved:—an important contribution indeed, for psychosomatic fitness gives the will to great deeds as well as physical power for accomplishment.

But however admirable long-range aims, however they may serve national welfare, our immediate concern is to conserve manpower. For that, research is the only alternative to costly experience. To indicate just how costly current experience is, and hence just how urgent the need for research, let me cite figures released by the British:

The life-span of a military pilot is about 150 hours of combat flying. In that span, he has been drained of something vital. He is through. Consequently, England has to train fliers in numbers sufficient to provide for 100% replacement every three months. No elaboration of mine can add emphasis to those figures.

Endeavor to cover a broad and active field in the time at my disposal has resulted in a series of thumb-nail sketches. I hope that they have served at least to give you glimpses of our task and to give you assurance that the Medical Corps of the Navy is not remiss in its duties. The opinions and assertions contained herein are the private ones of the writer and are not to be construed as official or reflecting the views of the Navy Department or Naval Service at large.

DISCUSSION

A. T. McCormack, Louisville: I wish all of you could have shared with me the privilege of a recent visit to the new Naval Center at Bethesda, Maryland, where the most beautiful hospital that I have ever seen has been erected. On this same trip I had the privilege of going through the Walter Reed Hospital, the Medical Center for the Army. Not only in these two great institutions but in all the far-flung hospitals and the first-aid stations that the Navy and the Army have constructed and are conducting we see the finest things that are being done by American medicine. The research work of which Admiral Smith has told us is being carried on absolutely relentlessly.

There are devoted men who are pursuing these subjects who know what they are doing in saving manpower in this time of distress. It is one of the most stimulating experiences one can have, and I think a trip from the old Naval hospital to the new one carries one further than almost anything I have seen, and yet in the old Naval Hospital the same spirit actuated every man who was in it, and the personnel was so good that you forgot the outmoded buildings and the inconvenience to which everybody was placed. Now, in the new institution, which is as well equipped inside as it is outside and is a beautiful, a wonderful place, it is delightful to know that our brethern in the Navy as in the Army are in the environment where they have everything conducive to doing the work to which they are dedicated, in the very best way.

I know everybody shares with me the pride

we take in Admiral Smith's revelations of what has been accomplished in this great program that he has outlined to us today. We know what it means in the saving of the lives of our boys, and we are grateful to you, Admiral Smith, and to the Medical Corps of the Navy for having given us this very brief, very illuminating picture of what you are doing.

THE RELATIONSHIP BETWEEN THE LOCAL BOARD EXAMINING PHYSICIAN AND THE REGISTRANT WITH REFERENCE TO THE INITIAL EXAMINATION

J. L. Toll, M. D.
Lawrenceburg

The subject assigned me by the Program Committee in the military symposium is "The Relationship Between the Local Board Examining Physician and the Registrant with Reference to the Initial Examination."

The experience of an examining physician in a small community is quite different from that of one in a large city. In our county where everyone knows each other we know the registrant's families, the family characteristics, know whether they are straightforward and honest, or whether they are likely to be evaders or malingerers.

I work in a community of less than ten thousand. I have spent my whole life in this county and have been in most of its homes. For forty-five years I have been a practicing physician. In that period in a small county one is bound to know its people.

Compare my position with a local examiner in a large city where he knows comparatively few of the registrants and you will see how much more work, care and time his screening will require. I have tried to make it clear to registrants of our county through conversation, through public address and local paper exactly what my position is. They know now that the government is very anxious that if they have any physical defect unfitting them for military service that I should find it.

It is an expensive business to enroll a man in the army, start his training and soon find he is not fit for the job. It is bad for the government to have this debilitated man on hands to be cared for.

The registrant should know that the government has the advise of its ablest military men in setting up standards of physical qualifications essential to military service. So I tell him for his sake it is important to him and the community that he is not charged with a duty he is unable to perform. Then he readily sees that my job is to examine him, write down what I find and the Board will see whether he meets the qualifications set up by the Selective Service Draft Board.

In detail I use the following routine: The disrobed registrant stands before me. I look his body over to see what deformities he may have—look for scars showing evidence of former injuries or operations. Then I ask him what form of labor he follows, and how much time he has lost in the last year because of indisposition. If he is an ordinary laborer on farm, railroad, or in other industry and has been able to keep on the job, it means much to me. Then I ask if he has anything wrong with him. If he has I examine him according to that special ailment.

There are certain ailments he might call to my attention that I would never find. For instance, epilepsy. In that case I ask him who is his physician and get a statement from him stating that he has seen him have epileptic seizure and has attended him. If he has had no physician I ask for a signed statement from some reputable neighbor stating he has seen him have seizure. These statements are filed with his examination paper.

As regards those who have periodic attacks of asthma, I follow the same procedure. I examine all registrants carefully as regards venereal infection, hernia and bad teeth. I check up on their vision and hearing. One of the most useful things the local examiner does by his screening is in eliminating certain psychic, neurotic and mental cases. Knowing the individual we can spot his mental illness, how often he has been treated for troubles which he thought were physical when in reality they were mental. We know the mental troubles the parents, aunts, and uncles have had.

For example, some two or more years ago, before the Selective Draft was in operation, the government was calling for volunteers. A local young man went to a city, volunteered, was examined and accepted. After about a year of training he showed evidence of insanity and was hospitalized for a year with no improvement, and is still not right. This man could not

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have passed my board for I knew him, knew he was insane at times while at other times he appeared quite rational.

When we first began examining for the local draft board you know we were required to make a full and complete examination, which required one hour or more for each registrant. Then the procedure was changed. We were asked for a screening, which is a very superficial examination.

At first I wondered why we were asked to do such an incomplete examination. Now I know. The number of men we are now given to examine would take so long a doctor would have no time left for his regular practice. Of course, you all know the local examiner is doing gratuitous work. We see now that by screening we save the registrant and the government much time and expense.

A considerable number of the registrants have defects that are very obvious; these men may be crippled from infantile paralysis, blind, deaf and dumb. They may be without a limb, or have hernia, bad teeth, and many other things that eliminate them from military service.

As regards classification of the registrant, I leave that to the local board. I merely write down what I find. The classifications are often changed at Washington, D. C. The clerks keep themselves informed on what is the proper classification for certain ailments. Class 1B has recently been abolished and those in 1B who had defects that were amenable to treatment have been classified as 4F, which in the past has been the class of "no good" or "unfit for service."

I have made a study of the registrants who were formerly 1B quite carefully and thoroughly. Many of these could be rehabilitated, and over a term of six months or a year made serviceable for Class 1A. By finding the percentage of 1B to the whole number of registrants in our county and taking this same percentage for the state and nation I find there would be more than a million in that class who could be made into qualified soldiers.

My suggestion is that the government proceed now to rehabilitate these. We will need them later on if we are to have an army of ten or more millions. Unless we do it now it will be too late when we need them. If we should not need them for the army we have done them a great service.

We all believe and think we know that a democracy is the ideal form of government. However, in time of war democracy works very slowly. It requires a great deal of agitation from the masses to make an impression on the law makers. And then much talk among law makers before the sentiment is made into a law. That is my excuse for agitating the idea of rehabilitating registrants with minor ailments.

It could be worked this way. Let the local physician rescreen them and send them to the final board with the notation that they are remediable. The final board could enter them in the army with deferment. They would send these men home with orders for the local dentist or surgeon to correct their defects at the expense of the government. While recuperating the men could carry on their home work as far as possible. When cured they would be ready for active service.

I hardly think anyone could be so naive as to think we can win this war without an enormous amount of man power under arms.

In thinking of noted generals who became famous by winning wars it is apparent that they were prodigal in use of man power, and were willing to sacrifice many men to accomplish their purpose.

I recognize that I have gone some distance from my assigned subject, but seeing the ease with which a million men could be added, I could not refrain from talking about it. My purpose is to make you think. I hope I am badly mistaken about the amount of man power necessary to win this war.

Acute Pleural Empyema in Infants: Bettinotti directs attention to a type of acute pleural pneumococcic empyema which develops in infants about one month after pneumonia. There is no fever, but the general condition rapidly declines. The predominant symptoms are dyspnea, toxemia and rapid progressive loss of weight. Clinical and roentgenologic examinations demonstrate a large amount of pleuritic fluid. The course of the disease is grave and complicated. The 3 patients seen by the author were between the ages of 6 and 20 months. Two patients were treated by paracentesis followed by intrapleural lavage with a 5 per cent solution of ethylhydrocupreine hydrochloride. Puncture was performed at intervals of six days up to five and seven punctures, respectively. The patients recovered. In the 3 cases the pneumococcus was the causal agent. The author suggests the name acute pleural pneumococcic empyema without fever for the type of disease described.

THE PRELIMINARY PHYSICAL EXAMINATION IN SELECTIVE SERVICE

Lieut. Colonel Robert A. Bier, M. D.
Selective Service
Washington, D. C.

National Headquarters and the Nation deeply appreciate the help and cooperation of the medical profession in the work of Selective Service. It has been well known that the medical work of Selective Service has been one of the major operations in securing an army and it is a fine tribute to our doctors that the task is being very well done. In your own State of Kentucky, Selective Service has been very ably administered by the Director, Colonel Frank D. Rash, and the medical functions have been conducted in an excellent manner by you physicians under the leadership of Major William N. Lipscomb, the former State Medical officer of Selective Service. It was with considerable regret and reluctance that National Headquarters consented to having Major Lipscomb transferred to duty with troops. Captain William B. Atkinson, the present State Medical Officer, is now carrying on and we are confident that Kentucky will remain in the high state of excellence that it has maintained to date. With the medical burden somewhat lightened since the first of the year, by the institution of the preliminary physical examination, there is still a great deal of hard work to be done. In fact, it is largely due to the tremendous size of the task that there has been a change in the method of physical examinations.

As long ago as November, 1940, the idea of a single examination by the Army was suggested by General Hershey. During the peacetime procurement of the Army the dual system of physical examination was, without question, the best way to adequately eliminate unsuitable men being accepted by the Army. This system has been acclaimed by the Medical profession over the whole country. Now that we are at war the situation is changed and with the urgent need for large numbers of men and a reduced number of physicians to make the physical examination, especially in Selective Service, it has been necessary to make certain changes. This change from the dual system to the preliminary physical examination or inspection by Selective Service and a final type by the Army is now considered the logical solution to our problems in this respect. The wisdom of this system is apparent to us all now.

In studying the problem of lightening the burden of the medical examination on our civilian physicians, three pilot tests were established. The first in Pennsylvania, known as the Pennsylvania Plan, the next in Ohio, and the last in Indiana, all known by the name of the state involved. The Indiana plan appeared to be the most practical one and it was this plan with slight modification, that is now the basis for our present system of examination. Since January first of this year there have been minor changes to suit changing situations in both the Army and Selective Service.

Briefly, the reasons for the present system of physical examination in Selective Service are as follows:

A. The saving of physician man hours.

B. The Army must of necessity make the final determination of fitness of each registrant.

C. The elimination of the manifestly disqualified registrant.

In the first reason, that of saving physician man hours, it soon became evident to us that with the increase in demands upon Selective Service for more and more men to be examined, and with additional physicians called to military service, some provisions had to be made to take care of this additional load of work. With the number of physicians leaving the community, it was not wise, or economical, to have two groups of physicians doing exactly the same examination on the same registrant, therefore, the final type physical examination was eliminated at the local board and a preliminary one substituted. The preliminary examination serves to eliminate the manifestly disqualified as specified in list of defects (Form 220) and sends the balance of the registrants to the Army for the final decision as to their fitness for military service. In addition to this determination, the matter of rehabilitation came into the picture. With rehabilitation formerly considered, it was necessary that the Army certify as to whether or not a man would be acceptable to them after his defect or condition was corrected.

The reason for the elimination of the manifestly disqualified should be obvious to all. It saves the registrant's time, and

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conserves the time, energy, and money of Selective Service and the Army.

The preliminary examination consists of a very careful inspection of the registrant.

The exact words of the regulations are as follows: S. S. Reg. 623.33.

(a) The Director of S. S. from time to time, will issue a List of Defects, Form 220, which will set forth defects, not remediable which manifestly disqualify the registrant for military service.

(b) The physical examination of registrants should be held in a well lighted, well heated place. It should be held while the registrant is in the nude.

(c) The physical examination should consist of observing the registrant while walking toward, standing before, and walking away from the examining physician. The registrant may be required to go through calisthenics to determine the mobility of joints or to furnish a basis for determination of his alertness, intelligence, understanding of commands, postural tensions, tendencies to incoordination, and tremors. If peculiarities are noted, simple questions should be asked in an effort to bring out replies bearing on the mental health and personality characteristics of the registrant. The examining dentist, or if he is not available, the examining physician, will examine the mouth of the registrant. The examining physician will take blood from the registrant for a serological test.

(d) When the examining physician knows or learns of a history of mental disease in the family of the registrant, of social maladjustment, poor work record, other mental or personality conditions of the registrant, or any physical condition which might cause the Armed Forces to ultimately reject the registrant, further information bearing on the personal, social, and health history of the registrant shall be sought from local agencies, school systems, State Hospitals, training schools for defectives, and any other sources, and the examining physician shall review the information thus received and shall enter an abstract thereof on the Report of Physical Examination and Induction (Form 221) under "Remarks" or on a memorandum attached thereto.

(e) The examining physician may report upon a registrant as having a condition in the List of Defects (Form 220) when he has professional knowledge to the effect that the registrant is suffering from diabetes mellitus, if severe or if necessitating the constant administration of insulin; pernicious anemia, necessitating the constant parenteral administration of liver extract; sex perversion; active peptic ulcer with positive X-ray findings; Addison's disease; alcoholism, chronic, in such a degree that it interferes with earning a living in civil life; or hypoglycemia, chronic, persistent, in such a degree that it interferes with earning a living in civil life. The examining physician may also report to the local board on the case of a registrant who does not personally appear before him when the report is based upon his professional knowledge that a registrant has a history of commitment for mental disease, is actually confined in a mental institution with a diagnosis of psychosis, is an idiot or imbecile, or is confined as an invalid to his home or in an institution and such conditions of a character which makes it inadvisable for the registrant to personally appear before the examining physician at the place fixed for his physical examination. If the examining physician does not have professional knowledge of such condition of the registrant he may accept an affidavit from a reputable physician or an official statement from the government agency concerned as to such condition, and such affidavit or official statement shall be attached to the Report of Physical Examination and Induction (Form 221). In all other cases the registrant shall personally appear before the examining physician and be examined in the manner provided in paragraph (c) of this section.

The wording of the Regulations was selected with utmost care and represent the standards for the preliminary examination. Selective Service Headquarters prefers to have it called the Preliminary Physical Examination. Prior to the institution of the new examination National Headquarters has heard from many sources that doctors were complaining that there was too much work to be done in examining the registrants. Now we hear the doctors complain that there is not enough work to do and that this examination is beneath their dignity. We, at National Headquarters, believe that these complaints are from a very small minority of the physicians and that the Medical profession as a whole is heartily and cheerfully cooperating in doing everything that they are asked to do in this national effort. As a matter of fact, what task is beneath

our dignity if it will help us win this war? Rather than the inspection examination being beneath the dignity of our physicians it actually presents a challenge to their diagnostic acumen. Witness the expertness of the immigration medical inspector who must decide whether or not an immigrant is suitable physically to enter our country. These physicians not only have to inspect their patients fully clothed but they must examine women and children as well in a very short space of time.

This examination, as outlined in Selective Service Regulations, is a very careful, minute, comprehensive inspection examination. A well trained and observant physician can detect many diseases or conditions not apparent to a casual observer. The skill, interest, and acumen of the physician will determine the quality and value of the examination.

To illustrate the problems that are encountered in the preliminary physical examination by local board physicians a few examples will be mentioned. Some physicians feel that it is only a responsibility of theirs to report conditions actually named in Form 220 (List of Defects). It is true that we request that they report only those diseases in Form 220 (List of Defects) on space 26 of the Report of Physician's Examination (Form 221) for classification, but under item No. 25 the physician may and should report any health, personality or neuropsychiatric condition of which they have any knowledge or even suspect. This information should be recorded for the benefit of the examiner at the Army Examination and Induction Station who is making the final type examination upon the registrant.

There have been evidences of complaints from Induction Stations that local board physicians do not report all the manifest physical conditions which should disqualify a registrant. Apparently some physicians are not familiar with the list of defects in Form 220 or else do not use it as a reference. There are two main requisites for making a proper preliminary physical examination. First a clear knowledge of the regulations which state how the examination is to be conducted and second, a working knowledge of, or familiarity with, the list of defects in Form 220. The instructions are brief and concise and should be followed exactly.

Recently there have been several conditions added to the list of defects in Form 220, as Diabetes mellitus, pernicious Anemia, etc. as mentioned before. We appreciate the fact that there are other conditions which you gentlemen would like to have added as manifestly disqualifying a registrant for military service. We can appreciate your attitude in this matter but for various reasons it is felt that a better purpose will be served by having registrants with certain conditions submitted to the Army Examining and Inductions Station for a final type physical examination.

Even though a condition may not be mentioned in Form 220 (List of Defects) there is absolutely no reason why the local board examining physician cannot state on the Form 221 (Report of Physical Examination) the exact status of the registrant. Or, if the physician knows that a registrant is capable of unlimited physical and mental activity in spite of some defect, that also should be stated. In short, any and all information that the local board physician can furnish to the Army Medical Officer making the final type examination will enable the latter to make a much better determination as to the individual's fitness or unfitness for military service. There is a grave responsibility on the part of the local board physician to observe and report any deviation from normal to the Army examining physician when they make this preliminary examination.

There have been instances in which even manifestly disqualifying conditions mentioned on Form 220 (List of Defects) have been passed by the local board examiner. For example, DSS Form 220 lists "Varicose veins, if severe and if associated with edema and ulcer of the skin." This should be reported for classification in IV-F. There have been instances where men have been sent forward to the Army with severe varicosity, accompanied by edema and scars of old ulcers. Obviously these men should have been classified as IV-F by the local board. The extent of certain musculo-skeletal deformities are difficult to judge. If there is any doubt in the mind of the examining physician these men should be forwarded for final determination by the Army. Often the history of what a man has been able to do in civilian life affords a valuable criterion whether or not, with a particular condition, he will qualify for military service. Formerly when Rehabilitation was actively considered, operable hernias were sent

to the Army. Now these operable hernias and all others will be classified as IV-F.

At times we have heard what seemed to be disagreement between the Army and Selective Service. There may have been differences of professional opinion but this is only natural among professional men. Both systems are attempting to do the same job; that is, procuring suitable men for the Army. There was a slight difference in objective in the minds of physicians in Selective Service and those in the Army. It is the duty of Selective Service to send up as many registrants as possible; while the Army rejects all the men that they consider may be a liability rather than an asset. With a peace time Army, this phase of the function was emphasized, but with WAR, the objective of the Army has become virtually that held by the Selective Service; namely to bring into the service as many men as can serve to best advantage. Consequently the percentage of total rejections by the Army and Selective Service are definitely below those of 1941. National Headquarters has attempted to foster cooperation and team work between the Army and Selective Service. Both systems have liaison officers for that particular purpose and every effort should be made by everyone concerned to use that liaison to iron out any real or fancied differences. There have been joint Army and Selective Service meetings in almost all nine Service Commands (formerly called corps areas) for the consideration and solution of common problems. Should it be felt in Selective Service that any registrant or registrants have been erroneously rejected by the Army there is ample provision under the regulations to have these men reexamined, by the Medical Advisory Boards. If the report of the Medical Advisory Board warrants it, these men should be resubmitted to the Army with a copy of such report from the Medical Advisory Board or any other information from the local board or examining physician bearing upon the case.

In fact, National Headquarters strongly urges that every effort be made to properly reclassify registrants, rejected for physical reasons either by Selective Service or the Army, if there is any indication whatever that the registrant has not been properly classified. A point in question is that of men rejected for cardiac disease, especially those rejected by the local board physician in the earlier days of Selective Service. These men should be submitted to the cardiologist or internist on the Medical Advisory Board for a reexamination and reclassification by the local board. It has been the experience of a number of states that many men may be reclassified for military service in this way.

Since the establishment of the preliminary physical examination the function of the Medical Advisory Board has been somewhat changed. Registrants will not be sent to the Medical Advisory Board before they have received the final type physical examination at the Army Examining and Induction Station. In other words, no attempt will be made by the physician of the local board to establish an exact diagnosis which necessitates the use of methods other than inspection. The Medical Advisory Board may, however, be used freely in the reclassification of registrants after their examination by the Army as just described. The one exception to this procedure is the examination of Conscientious Objectors. The present regulations provide that a final type physical examination will be made by the local board examining physician on Conscientious Objectors, and if necessary, the Medical Advisory Board may be consulted to complete this examination. National Headquarters wishes to stress the apparent need for more complete physical examinations on Conscientious Objectors, before they are ordered to duty in camp for work of national importance. It might be well at this time to explain to you very briefly the part of the Conscientious Objector in Selective Service. Of the Conscientious Objectors in this country, there are only a very few men classified as Conscientious Objectors to date, about 5,000, out of the many millions of registrants. These men, in lieu of serving in the Army, have agreed to enter camps and participate in work of national importance. It is the responsibility of the examining physician in Selective service to see that these men are physically able to withstand the rigors of whatever severe physical exertion which their duties entail. As an example of the important part they are playing in work of national importance is the substitution of Conscientious Objector camps for those of the C.C.C. recently abolished by Congress. Many of these camps on the West Coast have been established for the prevention and control of forest fires and their value and importance in this work can scarcely be estimated.

The mental and personal attributes of the registrants are of the greatest importance. A major problem in our work has been the elimination of the mentally unfit. The Army recently has made psychologists available to the Army examining Teams for the measurement of the mental appitude of the registrant. Any and all information bearing upon the history of the registrant as regards his mental capacity, social adjustment, work record, education, etc., in possession of the examining physician should be furnished for the use of those psychologists and psychiatrists at the Army Examining Stations. In fact, it has been stressed on numerous occasions by the examiner at the Army Induction Stations that there is a great and urgent need for more and better histories on registrants presented to them. We at National Headquarters cannot stress too strongly the need for as complete a social service history on every registrant as can be obtained. In most cases, physical defects are not too difficult to discern but mental or psychological ones at times present almost insurmountable obstacles unless an adequate history is present. In many cases even a hint or suggestion on a registrant's history may enable the psychologist or psychiatrist to further his examination and uncover disqualifying defects which would never have been disclosed otherwise. The use of the state or other social agencies as a source of information has been very successful in some states and their use is strongly urged.

A source of considerable trouble in Selective Service has been that of Venereal Diseases. We are informed by the War Department that they propose to induct uncomplicated venereal disease as soon as facilities can be arranged for their proper care and treatment. We are further advised that these buildings are being given priority and that it is expected that facilities will be available in the near future.

Regardless of any additional facilities we are told that after October 1st, 2% of any day's induction (in either race) may be those registrants suffering from uncomplicated gonorrhea.

With the increasing shortage of physicians throughout the country there is a problem of having sufficient doctors in Selective Service to make even a preliminary examination. There is also an apparent shortage and the need for reorganization of our physicians in Selective Service becomes necessary. To help relieve the situation and to reduce the time required of these examining physicians National Headquarters recommends that group examinations be conducted en masse.

We are all familiar with the mass production methods used in industrial production that are so vital in winning the war. Therefore, we may use mass production methods in our own work in Selective Service. As an example of perfect mass examination in Chicago in the examination of registrants less than 200 doctors now carry on the work formerly requiring 2,000 doctors working individually. These group examinations in Chicago under the direction of Colonel Paul G. Armstrong, Director, were inaugurated by Lt. Colonel E. Mann Hartlett, State Medical Officer, and Major Robert H. Sykes, his assistant. In an official report from Colonel Hartlett concerning this examination the following statements are made: "To date these stations have examined 35,218 registrants and taken 3,220 repeat bloods. These examinations are being accomplished by 165 doctors and dentists assisted by five laboratory technicians."

Just before leaving National Headquarters a letter was received from Dr. Frank J. Norton, Chief Examining physician of one of these large examining stations in which he states:

"On the basis of my experience in this type of examination, I wish to state that the screening examination can be handled with fewer doctors than one realizes. At the Grand Crossing Park Examination Station we have a system perfected where by we can accomplish more work with a few doctors working in a well organized group than with many unorganized doctors. It is my estimate that fifty doctors could efficiently handle the local board examinations for the entire city of Chicago, where before the adoption of the present procedure the services of approximately two thousand doctors and dentists were required. The marked economy in the saving of "doctor hours" is at once apparent.

Incidentally, for the information of some doctors who see no professional value in a mere inspection type of physical examination I wish to point out that "inspection" has always been and should always be the first phase of a classical physical examination and it is important as a means of detecting pathology and should not be under estimated or above all should not be neglected by indulgence and

reliance on laboratory and hospital tests and procedures.

Many of the examining physicians who are members of my Board of Examining Physicians operating at Grand Crossing Park and who have in their practice of modern streamlined medicine allowed the "inspection" phase of physical examination to be supplanted by the x-ray and other laboratory diagnostic measures, are beginning to develop their skill of diagnosing defects here at Grand Crossing Park by an ever improving inspection ability. My examining physicians, participating in this present screening type of physical examination have become enthusiastic in playing the game of "spotting" pathology. Examining physicians, who are really interested in this type of examination, owe a debt for the privilege of participating in this refresher course which is making them more alert and is developing their senses of sight, hearing, and touch in the detection of physical defects."

While these mass examinations are especially adaptable in metropolitan areas, it is even possible and rather desirable to conduct them in smaller communities or districts. Several physicians with suitable clerical help and if possible technical help may examine a large number of registrants in a much shorter time and with less effort than examining them individually. These examinations may be conducted at a centrally located place on transportation lines and save the time of the registrant as well as that of the doctor. In areas where there are no physicians available, small teams consisting of several physicians from the surrounding area could be transported to a centrally located point and examine a group of registrants at stated intervals. In areas where there are apparent shortages, rather than real, there is need of reorganization such as described above in Chicago. Here in your own State of Kentucky there is a shortage of physicians so that reorganization may be necessary to help solve the problem.

I have attempted to give you in a brief time the essential points in the preliminary examination of registrants and some of the problems encountered. In conclusion I wish to emphasize certain points which we feel are important in the preliminary physical examination. The preliminary examination by Selective Service and the final type physical examination by the Army has produced a very practical and economical method of selecting men for the Armed Forces. We are advised by the Surgeon General's Office that this method is very desirable and productive of good results. The most important part of this phase of the examination in Selective Service is the procuring of information by the local board and the examining physician of all information that is obtainable locally which would not be available to the Army examiners. The desire of Selective Service is to continue to help as much as possible with the relatively reduced personnel now available. It is our duty to adopt methods in accordance with the changing conditions. This may entail considerable hardship and other inconveniences upon us but we must do everything we can to win this War. I am sure the physicians, and especially in Kentucky, will not be found wanting in putting forth their greatest effort to accomplish this end; Peace For Us All.

ARMY EXAMINATION AND INDUCTION ROUTINE

JACK E. DITTMER, CAPTAIN, M. C.
Louisville

Mr. President, Members of the Kentucky Medical Association, and Guests: One could hardly call this a formal paper—but rather an informal description of one small part in the procedure of obtaining men for the Army of the United States. I shall attempt to give you a description of the U. S. Army Medical Examination and Induction Board No. 8 as it functions in Louisville.

U. S. Army Medical Examination and Induction Board No. 8 has been in existence since shortly after the Selective Service Act was passed by the Congress of the United States. From the beginning, it has been divided into two closely functioning teams. The first of these is the Medical team which is responsible for the determination of a selective service registrant's physical and mental qualification for military service; the second team is the Administration Department which is responsible for the housing, feeding and induction of the men into the Army of the United States, as well as any other non-medical problems that may arise. One team is no more important than the other; they must function together, rather than as individual groups.

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The Commanding Officer of the Board is a Line Officer. He is responsible for the station as a whole, and is in command of the personnel of the Board. On the Administration team and under the Commanding Officer, are the Line Officers to whom the following duties fall; accountability of property, feeding and housing of selective service registrants, all transportation of registrants from our Board, and the induction of all those found physically fit for military service into the Army of the United States. Also, under the Commanding Officer are the Chief Clerk, Assistant Chief Clerk, and the clerks who do the necessary typing, filing, etc.

The President of the Medical Board, or Chief Medical Examiner, is directly under the Commanding Officer. He is responsible for the physical examinations and all medical problems which may confront the Board, e. g. that the food served to the registrants is adequate, and properly prepared under sanitary conditions, that the housing facilities are not over-crowded, etc.

Under the Chief Medical Examiner are one Dental Officer, a varying number of Medical Officers, a Chief Medical Clerk, an Assistant Chief Medical Clerk, medical clerks and laboratory personnel.

The Selective Service Local Boards deliver to us a certain number of registrants, in accordance with a schedule which is prepared by Selective Service State Headquarters. These men arrive at our station by the most convenient means of transportation from their community.

As these men arrive by Boards, they are met at the front door by a guide, who escorts them upstairs and helps them check their luggage—since they have been instructed to bring clothing for three days with them. They are then taken into a large room and told about the two weeks' furlough—when they will get it, if they want it. Here, they are asked about any previous military service and questioned individually as to the type of discharge that they may have received from the Army, Navy or Marine Corps. They are then given a numbered coat hanger and a cloth sack with a corresponding number. They are instructed to remove their valuables from their pockets, place them in the cloth sack and hang it around their necks after they are undressed; they are also instructed to put their clothes on their own clothes hanger and check them in at the clothes' room. Each man is then given his papers with a medical work sheet attached. The medical work sheet has been numbered to correspond with his number on the Local Board's delivery list. A skin pencil is then used to put the same number on the left arm of the registrant. By this means, it is easy to check whether or not the man is carrying his own work sheet and papers through all or part of the examination.

The men are now ready for their medical examination. Their first stop is at the electric typewriter where the man's name, Local Board and address are typed on a small lead plate. This is given to the man and he is sent on to the X-ray machine. Here, his lead plate is taken from him and placed in the X-ray field on the cabinet which contains the paper film. He is instructed to remove the sack from around his neck, to hold his sack and papers in his left hand, and to lean against the cabinet. His chest plate is then taken on a 14 by 17 paper film. From here, he is sent into the laboratory where he is given an inspection for venereal disease, and if free from gross evidence of such, is given a bottle for a urine specimen. The routine tests that are made on this specimen are specific gravity, albumin and sugar determination. If a urethral discharge is found, a Gram's stain is done on a urethral smear. A note is made on the registrant's work sheet to that effect and he is sent back to put on his under-drawers. Any registrant with a suspicious skin rash or penile lesion is given a special examination by one of the medical officers.

From the laboratory, they go to the Dental Officer who checks their teeth, bridges, dentures, etc., to see if they meet Army standards. This Officer also checks hearing routinely. Impaired hearing, if found by the Dental Officer, is checked by the E.N.T. examiner as to the degree of loss, in order that the registrant can be classified correctly, i.e., in general military service, limited military service, or not physically qualified for military service. The E.N.T. examiner checks their ears, noses and throats for any pathology. In passing, it might be interesting to note that it keeps one enlisted man busy washing the cerumen from the ears of the registrants

Next, they are checked by a medical examiner for hernias, hemorrhoids, and again for venereal disease. Following this, they go to the orthopedic examiner who checks the registrants for skin defects,

musculo-skeletal defects, foot defects and for varicose veins.

Next, the eyes of the registrants are checked. Their visual acuity is determined and a registrant with deficient visual acuity is given an ophthalmological examination. Any registrant who has deficient visual acuity which is not correctable, and for which the eye examiner cannot account, is sent forward to the Reception Center for Further Clinical Study. A note to this effect is made on the work sheet by the examiner.

The registrant is now measured for height and weight. Also, his chest at full expiration and inspiration, and finally his waist is measured. From there, he goes to the heart and lung department. It is here that each man has his blood pressure taken and is given a stethoscopic examination of his heart and chest. He is quizzed as to having had acute rheumatic fever, asthma, or any trouble with his heart or lungs. Keeping his history in mind, any registrant with a positive history is re-examined. By this time the chest plates are ready to be read and the examiners may consult with our Roentgenologist as to pathology found on cardiac or chest examination.

Next, they go to the neurologist who routinely checks their pupillary reflexes, patellar reflexes, Rhomberg and finger to nose test. The examiner then quizzes them as to enuresis, syphilis, somnambulism, epilepsy, headaches, fractured skull, periods of unconsciousness, etc. Any registrant with a positive history is questioned more closely. All positive information is recorded on the work sheet. Any registrant with a positive neurological finding is given a more complete neurological examination in order that a working diagnosis can be made. By this time, the registrant's laboratory work has been completed and is ready to be recorded, i.e., the chest X-ray report, urinalysis, and urethral smear examination, if made.

Up until now, the men have been more or less on the move all of the time. The various examiners have questioned the men as to the particular part they have been examining, but little time has been spent to look at the individual as a whole. The registrant now goes into the psychiatric department where he is interviewed by one of the psychiatrists. The psychiatrist has the advantage of all the positive information recorded on the work sheet and during his interview takes a medical history. He attempts to balance the positive findings against the history of the individual. If, for any reason, the psychiatrist feels that any part of the examination should be repeated by reason of a medical history finding, he takes the registrant back to the special examiner and discusses the matter with him. Or, if the psychiatrist is of the opinion that the registrant has a low I. Q., he sends the man to the psychologist who runs a psychometric test on him before the psychiatric examination is completed.

After the psychiatric examination, the registrant goes to the Chief Medical Examiner's table where he is classified as to general military service, limited military service. or physically or mentally unfit for military service. Any positive information sent to the Army Examining Board by a family physician is taken into consideration, but in the last analysis, the Chief Medical Examiner is responsible; therefore, he must rely on the opinion of the Army Examining Board.

The same holds for positive information written on the permanent record by the Local Board Examiners. All positive information available is taken into consideration before our final conclusions are drawn.

It has taken the registrant approximately one hour to reach the Chief Medical Examiner who checks the work sheets. Any illiterate registrant is sent to the psychologist for a psychological examination and classification.

It is at the Chief Medical Clerk's desk where all requisitions are typed to the Reception Center requesting Further Clinical Study, e.g., spinal fluid examination, glucose tolerance test, Basal metabolic rates, Electrocardiagrams, X-rays of bones or joints, fluoroscopic examination of chest, etc. Any registrant on whom further clinical study has been requested cannot get his two weeks' furlough until after the clinical study has been completed at the Reception Center. The men on whom no further clinical study has been requested are asked if they want the two weeks furlough. Their desire is our command and they get what they ask for.

After this has been decided, they go to the battery of typists who transpose the information on the work sheet to the permanent record. Accepted men have service records started and fingerprints taken. All administrative information typed on

the form is checked for content and accuracy by clerks whom we call checkers. The checkers take up the papers and send the men back up stairs to get dressed. From the checkers, the papers come back to the Chief Medical Clerk's desk where the medical examination permanent record is checked against the work sheet. When this has been completed, the forms are ready for the signatures of the Chief Medical Examiner and the Induction Officer. As soon as these signatures have been placed on the papers, the accepted men are assigned Army Serial Numbers and are sworn into the Army of the United States.

While this is going on, the transportation department is arranging a schedule to return home those accepted men who want the furlough and those who have been rejected. Transportation arrangements to the Reception Center are also being made to send those accepted men who do not want the furlough along with those men who are to get further clinical study. This completes the examination and administration procedure except for the housing and feeding of Selective Service registrants while waiting for examination or transportation. These arrangements are made by the Administration department by awarding contracts to the lowest of several bidders.

Again, let me repeat that each part of the Examining Board functions as a part of the whole, not independently.

In closing, I wish to take this opportunity to thank the members of the Kentucky State Medical Association who have acted as civilian specialists, in behalf of U. S. Army Medical Examination and Induction Board No. 8, for their unending co-operation.

Plasma Substitute—A possible substitute or supplement for blood plasma in treating shock from hemorrhage in war wounds in case of shortages of plasma is announced by Dr. Robert Elman and Dr. Carl E. Lischer (Washington University School of Medicine and Barnes Hospital, St. Louis) in the Journal of the American Medical Association. The substitute is obtained from either beef blood plasma or casein, the chief protein of milk. In laboratory experiments such solutions showed themselves as good as blood plasma for treatment of animals in shock from repeated hemorrhage. Solutions made from pure crystals of all the essential amino acids also were definitely beneficial.

PROCESSING AT A RECEPTION CENTER

Rufus C. Alley, Captain
Medical Corps, U. S. Army
Lexington

The efficient mobilization and maintenance of man power to fight and win this war has placed upon the medical profession a burden of unprecedential magnitude. The size, importance, and urgency of this job is producing the expected result: it is being done.

The term "Selective Service" is self-explanatory. Its essential objective is to procure and place men in the war positions they are best qualified to fill. The basic unit of the Selective Service System is the Local Board composed of local citizens. It classifies the men under its jurisdiction and determines which of them are available for military service. These available men are then called, in predetermined sequence which is fair to all concerned, and sent to Army Examination and Induction Boards. There they are examined and, if physically qualified, inducted (with certain exceptions) into the Army of the United States.

Efficient physical examination of large numbers of men on mass production principles is a medical problem that has no counterpart in civilian practice. It is a procedure which, from necessity, must be reduced to a routine and so systematized that each Selectee is given a complete and accurate physical examination.

Physical standards, as outlined in Mobilization Regulations 1-9, are based on accepted medical principles and common sense. The following classes of defects, generally speaking, are sufficient causes for rejection for military service:

1. Those which are likely to cause frequent intermittent or prolonged disability.
2. Those which are likely to become aggravated by military service.
3. Those which are potentially disabling and likely to result in compensation or pension.

A man who is actually or potentially incapable of performing military duties is of little value to the army.

In general, physical defects which are not progressive and which do not materially interfere with normal activity are not considered disqualifying, while defects which are likely to be progressive or

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which are likely to be aggravated by military service are sufficient reasons for rejection.

Physical defects which are objective and easily demonstrated offer little difficulty to the Army Examining Board. The real problems arise in appraisal and proper classification of such conditions as treated syphilis, allergic disorders (mainly hay fever and asthma,) alleged enuresis and epilepsy, and many borderline conditions which may or may not be disqualifying, depending upon degree of severity.

The hasty and inexperienced mobilization of the first World War taught us many profitable lessons. In 1917 and 1918 many men with undetected early pulmonary tuberculosis and with actual or potential neuropsychiatric disturbances were taken into the army and later became Government charges, Veterans Administration records show an average cost to the government of more than $30,000 in hospitalization and compensation for each of these men taken into the army.

Every practicable known precaution is now being taken to prevent a repetition of this. Each man before induction into the army has a chest X-ray study, a serological test for syphilis, and a neuropsychiatric survey in addition to the routine physical examination. This is supplemented, when indicated, by special studies or laboratory procedures. Of course errors and oversights occasionally occur but it is believed they are within minimal acceptable limits considering the tremendous volume of work handled.

Military perspective concerning value of an individual does not always coincide with civilian ideas. In such cases the attitude of the army is based on past experience and what may reasonably be expected of the individual in question. This explains most of the cases of misunderstanding and criticisms that have arisen. Sometimes an army board will reject a man whom the local community thinks should be in the army. Often the reason for such rejection is information possessed by the army board that is not generally known in the community. It is also true that army boards are reluctant to enter on the permanent record of a rejected man information that may be considered derogatory by his community or that may interfere with his gainful employment in civil life. When such entries are necessary they are often made in the form of a reference to the Army Regulation authorizing the rejection. Therefore, criticism of army board decisions should be with-held until all facts involved are understood.

Some physically qualified men are rejected for administrative reasons such as bad criminal record, discharge other than honorable from the Armed Forces, prior committment to an institution for nervous and mental diseases, or inability to speak or understand the English language. The army is not to be looked upon as a correctional or educational institution into which can be dumped the town drunkards, ne'er-do-wells, or other misfits. Successful modern warfare requires intelligent individual and coordinated group performance. A crackbrain in a critical spot may jeopardize not only his own life but the lives and welfare of many others.

The literacy requirement was formerly at least four years of grammar school or equivalent as demonstrated by a single literacy test. Recently a psychological examination has been standardized and adopted. The army can now accept absolute illiterates for military service provided psychometric tests show they are capable of absorbing military training sufficiently qualified for combat service.

An experimental induction of men with certain stabilized physical defects for limited service with non-combat units has shown that they can be used satisfactorily. This does not impair the efficiency of the organizations to which they are assigned and it releases men who are physically qualified for combat service.

Examination of large numbers of Selective Service Registrants from all over the country is disclosing much data of scientific interest. Generally speaking, the groups from urban or thickly populated areas are noticeably better physical specimens on the average than are those from more isolated and thinly populated areas. A probable partial explanation for this is differences in health supervision, particularly during school age.

Study of Selective Service records will reveal a wealth of new information concerning national health and welfare, and will furnish valuable control statistics for future public health programs.

After physically qualified selectees are inducted into the army by the Examination and Induction Board they are sent to an Army Reception Center for "Processing." The processing procedure, like examination and induction, is a routine so coordinated that large numbers of men

can be handled in a minimum of time. It consists essentially of the following steps:

1. Issue of properly fitting uniforms, other clothing, and shoes.
2. Classification according to civilian occupational training.
3. Aptitude test and classification.
4. Administration of smallpox and first dose of typhoid vaccines.
5. As much elementary military training as time permits.
6. Shipment to training camps.

The furnishing and issue of clothing is, in itself, not a small undertaking. The proper fitting of shoes is given critical attention and alterations of stock sizes or even specially built shoes are prescribed when necessary for a proper fit.

The Classification Section accurately classifies each man according to his scientific, technical, or manual training, if any, and records any special skill he may possess. This information is transferred to machine record cards so that men qualified in any given field can be easily located. Thus a pool of men with especially desirable skills is maintained and drawn upon to fill existing needs in various army organizations. For instance, a skilled automotive mechanic would normally be assigned to a unit concerned with maintenance of automotive vehicles, and a pharmacist would ordinarily be placed in the Medical Department.

The aptitude test places each selectee in one of four intelligence levels. This makes possible the procurement, training and assignment of competent men to key positions with a minimum of lost motion.

This brief resume of but one phase of modern military planning and procedure illustrates the basic efficiency with which our Armed Forces are being placed in the field. The struggle may be long and difficult but persistent and efficient hard work on the part of all concerned will assure certain victory.

Tuberculosis, like all plagues, spreads most dangerously in the close contacts of the family. Resistance breaks down before a mass attack, and the steady bombardment of each other by husbands and wives, parents and children, brothers and sisters is the best of all mechanisms for perpetuating the disease. People exposed to tuberculosis in their own homes are, roughly, ten times as likely to fall sick of it as are people in the population at large. "Plague On Us" by Geddes Smith, Commonwealth Fund, 1941.

HYPERTENSION

R. G. Webb, M. D.
Livingston

To warrant the use of the word Hypertension the pressure must be permanent at 160.

Etiology: Clinically it occurs in a variety of conditions, always remembering that there may be a combination of factors and the most important are:

(1) Hypertrophy of the left ventricle.
(2) Chronic nephritis or any kidney disease; intestinal nephritis or stones.
(3) Arterio-sclerosis.
(4) Endocrine-gland disturbance. This we meet mostly in women about the menopause, this includes many puzzling cases.
(5) Intracranial conditions causing pressure.
(6) Increased volume of blood.
(7) Increased viscosity of blood.
(8) Obesity.
(9) Vitamins.
(10) The loss of some kidney hormone.

Hypertension is not a disease, but only a symptom or warning signal of something wrong in our bodies somewhere, the symptoms of which we are all familiar. These are headaches, vertigo, feelings of fullness in the head, shortness of breath and back pains. However, in a great many cases we see of high blood pressure there are no symptoms at all and the first time the patient knows that he has high pressure is when he comes to us for some medical examination for work or insurance. I have in the past three years found a number of cases that way, where a man had no symptoms that would have led him to consult a doctor. In my selective service examinations I have found a number of these cases in young as well as middle age, and some of them have completely had me guessing as to what was the cause. Only Tuesday, of this week, I had a young man of 19 who had blood pressure of 180/120. Dr. M. Pennington happened to be in the office with me when I was examining this man, he had treated him at times. We talked this case over and tried to come to some conclusion just what was responsible for this kind of pressure in a boy of this age and my guess was that it must be due to a toxic Thyroid. Anyway, this is a case of interest and one that I would like to see followed up with the different tests so that a diagnosis could be made. I could

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list here dozens and dozens of other cases that would be of interest but that would only take up time which I want to devote to other points.

I have done more study and spent more time on both high and low blood pressure in the last seven years than in all of my practice for two reasons, (1) Having low pressure myself. (2) Seeing so many cases of high pressure, with so many deaths that we had to attribute to high blood pressure. (3) After a study of the statistics representing the causes of death I find the appalling fact that arterial hypertension wipes out an army of men and women each year and from this fact there has come a challenge to me and you that we must find the cause as well as a rational treatment.

Now the treatment of this or any other condition of our bodies must be based on a knowledge of the cause. Do you know the cause?

Hypertension has been little understood in the past; and treatment has been indifferent and neglected, we are all guilty of this simply from the fact we did not have or know just what we should use in these cases.

In the last few years the medical concept of hypertension has been revised. Although there are still many gaps in our knowledge of hypertension, there is much that is now known, and the challenge to us is to gather together that which is known and keep abreast of all the research that is being done by our co-workers in their laboratories.

Clinically, hypertension appears to be due to increase in effective peripheral vascular resistance and augmentation of the force of the heart beat. The altered diastolic and systolic pressures are compensatory adjustments for the maintenance of adequate capillary circulation in the tissues. The supply of blood to the tissues is essentially the same in patients suffering from uncomplicated hypertension as it is in normal subjects. The elevated diastolic and systolic pressures are secondary responses to generalized arteriolar constriction. Hence Hypertension is a progressive, obstructive disorder of the arteriolar system.

Goldblatt introduced a satisfactory method of producing hypertension in animals, he found that persistent hypertension may be induced by the constriction of the real main arteries. The development of this method was based on the assumption that in the most common types of high blood pressure, Arteriosclerosis of the kidney was the primary cause. It was shown by his tests that after constriction of the main renal arteries to a degree to produce renal hypertension, renin, an enzyme, is liberated into the blood stream and that the enzyme interacts with a pseudoglobulin substance in the circulating blood to form final substance, angiotonin or hypertension, which is the effective vasoconstrictor. He also shows that injections of renin are identical with the changes produced by the experiments.

He further states that the chemical substance which appears to be formed in the kidneys is effective in narrowing the arterioles as a result of increased tonus of the vascular wall. This is a wide spread effect, involving the arterioles of the skin, muscles, kidneys, and brain. The therapeutic point of attack then, must be on the forces which set in motion the mechanism to bring about this arteriolar constriction. Studies have also shown that the endocrine are responsible in so far as they maintain the body in such a state that it can react in the chemical system, which is really responsible for essential and nephritic hypertension.

Scott states that arteriosclerosis is the primary disease in hypertension.

I cannot state in this paper that Golbblatt, Scott, Osler or any other writer or investigator has solved our problem. It may yet be in the making, however, I firmly believe by my experience, that the kidneys are responsible for 75% of the cases. I also want to add that obesity in my opinion plays a very important role and that may safely connect up with the over active endocrine glands, the highest systolic pressure that I have ever recorded has been in this group of patients, the fat heavy weights and the big muscular red faced type. Syphilis has played the exciting role in some cases that I have had, the old limited treated cases, and that probably makes a connection with the heart, arteries, glands, and kidneys.

We also have a new theory of diet deficiency as the probable cause.

Treatment: Unfortunately, as I have said, we have no specific treatment for the disease up to this hour. Hypertension is in the same boat with tuberculosis, typhoid and cancer and until the investigators find the remedy we will just have to use what we have and what we have found to give us the best temporary relief. Cal-

der believes that the B-complex vitamin is of value in securing proper oxygen in the kidneys.

Vitamin A is recommended by Walkerlin, Moss and Smith. They treated 65 patients with improvement in all but four, one hundred eighty thousand units were given orally each day until the pressure dropped 30 to 40 mm. then the patient received 90 thousand units daily for several months.

Harris says that the ideal drug for the reduction of blood pressure is the thiocyanates as their action causes no change in the pulse rate, circulating blood volume, cardiac output, vital capacity or electrocardiagram.

The treatments in combination that I am now using are: Phenobarbital 1-4 gr., Theobromine 2½, Potassium Iodide 2½ grs., Phenobarbital 1-4 gr., Theobromine 4 gr., Potassium Iodide 1 gr., Ext. of mistletoe 1 gr., Sodium Nitrate 1 gr., Tr. Aconite 2 min., Atrophine 1/1000, Phenobarbital 1½ gr.

Allimin, garlic and parsley, I have tried out samples of these, and cannot give results that have been highly advertised to the profession.

In closing I hope to have brought out in this short paper something that will be of interest, or something that will cause you to think and do a little investigation. The Lord knows that this is one field in which we in the profession are lacking in knowledge of the cause and the treatment. If we read, think, try, practice and act, we might be able to invent some treatments of our own.

Sugar Content of Preserved Blood: Using the picramic method of Seifert, Kato and Nakahori made a series of quantitative determinations on the sugar content of preserved human and rabbit blood which had been kept at 3 to 4 C. (37 to 39 F.). The reducing power of rabbit's blood begins to decrease after forty eight hours of storage, but some of the samples exhibited no evidence of diminution for as long as two hundred and sixty-four hours. On the other hand, human preserved blood appeared to contain greater glycolytic activity, since in most of the samples the sugar content was found to be less than 30 mg. per hundred cubic centimeters when tested after forty-eight hours of storage. The glycolytic action of preserved blood is due to the ferment present in the formed elements of the blood, and therefore this action is either greatly retarded or entirely abolished when the erythrocytes are hemolyzed by freezing and they are, as sediments, removed from the sample.

DEAFNESS AND ITS DETECTION

Captain A. J. DiCello
Medical Corps, Fort Knox

Incidence: The importance of deafness to the otolaryngologist can be readily appreciated by the fact that deafness in some form or other is present in about ten per cent of the population. By careful examination of school-age children it has been repeatedly found that about seven per cent are handicapped in their classroom work because of temporary or permanent defects in hearing. Recognition of the prevalence of deafness is strikingly apparent especially so to the Army medical officers who work in that field during a period of mobilization of the manpower of the nation such as we have been undergoing for the past two years.

Classification: The various types of deafness are classified according to certain characteristics, into conductive and perceptive. Conduction deafness results when there is interference with the transmission of sound at any point from the auricle to the internal ear. This includes the auricle, external auditory meatus, the external auditory canal, the tympanum, the chain of ossicles, the tympanic cavity, the Eustachian tube and the delicate balance of the intrinsic muscles. Perceptive deafness is attributed to a lesion somewhere in the neural mechanism, i.e., in the cochlea, the acoustic nerve or in the brain center. A unilateral impairment is the usual case in severe deafness. Otosclerotic deafness, commonly recognized during adolescence or shortly afterwards, is a progressively increasing deafness for all the tones of the musical scale but may be more marked for either the low or the high notes, which eventually includes the whole range of tones.

Congenital and Acquired Deafness: The two main types of deafness may be either congenital or acquired. Whenever large groups of children are studied about two-thirds of all cases of profound deafness will be found to be congenital. Heredity and consanguinity are the important etiological factors. A family history of deafness can be elicited in about thirty per cent of the cases and consanguinity in about seven per cent of the cases. Taylor has called attention to the possible relationship of deafness in children and the administration of quinine to pregnant

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women before confinement. In acquired deafness the etiological agent or cause is often obscure. Undoubtedly the neural mechanism is affected frequently by general systemic disease, chemical and blood changes. Deafness is usually evident by the fifth year. Meningitis is the most important etiological factor of acquired deafness in children, accounting for about twenty per cent. Measles, scarlet fever and mumps account for about ten per cent each. Syphilis is not an important factor in childhood deafness. Deafness acquired after the age of puberty is, in the great majority of cases, due to otosclerosis with or without ankylosis of the stapes. Heredity is an important factor in these cases. As a general rule, in childhood a tubotympanic process affects the hearing; in adults otosclerosis is the usual cause, and late in life a nerve degeneration referred to as presbyacousis.

The pathological lesion of acquired perceptive deafness is an involvement of the nerve mechanism in the internal ear, whereas in conduction deafness the pathological process is in the middle ear, affecting the transmission of sound. Some of the causes of acquired perceptive deafness are as follows: 1. Toxins from the acute exanthemata or some focus of infection; 2. Drugs, such as quinine, salicylates, arsenic, nicotine, bismuth, etc.; 3. Traumatism causing fractures of the temporal bone; 4. Certain occupational hazards. Those associated with excessive noise have been known to cause perceptive deafness. Lead, arsenic, anilin dyes and phosphorous cause changes in the eighth nerve. Caisson disease is a definite entity; 5. Certain blood discrasias, such as leukemia, pernicious anemia, may produce hemorrhage into the labyrinth, with sudden profound deafness. Some of the causes of conduction deafness, congenital and acquired, are: 1. Auricular deformities; 2. Inflammatory conditions of the canal; 3. Acquired or congenital stricture of the auditory canal; 4. Exostoses of the osseous canal; 5. Foreign bodies in the ear; 6. Impacted cerumen; 7. Salpingitis; 8. Secretory and adhesive diseases of the tympanic cavity; 9. Suppurative disease of the middle ear, acute and chronic; 10. Ear polypi.

Detonation Injuries: Since war produces an occupational hazard it seems appropriate to speak a little about detonation injuries of the tympanum and labyrinth. This refers to ear injuries not due to missiles but to the result of the explosion of guns or bombs. Experimental work has shown that the detonation of high explosives produces first a wave of increased pressure followed by one of decreased or negative pressure. Either of the two components may cause rupture of the drum. This phenomenon of detonation has been appreciated by the observation of the approximately equal number of windows blown in and blown out in a bombed area. The effects of the middle ear are dependent on the explosive capacity of the bomb and the distance of the victim from the explosion. Tympanic injuries are more frequent in men than women, probably due to the greater likelihood of women screaming at the approach of a bomb, thus tending to equalize atmospheric pressure on both sides of the drum. Holding the mouth open was found to diminish the incidence of tympanic injuries. Barriers such as walls and sand bags between the explosion and the victim reduced the incidence also. Thirty to sixty per cent of all persons within the effective radius of high explosives suffered rupture of the ear drums as reported in Medical observations during the Spanish Civil War. It can therefore be readily seen why examination of the ears of all blast victims is important so that proper treatment can be immediately instituted and complications avoided. An important observation also has been that in no case has rupture of the pars flaccida been found due to an explosive blast. This knowledge can be used to advantage to rule out certain claims of injury when attributed to explosions and rupture found in Shrapnell's membrane. Experimentally, clinically and anatomically it has been proven that damage occurs to the inner ear also from explosions, the damage consisting of hemorrhage into the labyrinth and atrophy of the organ of Corti principally the first two turns of the cochlea. The area about the round window is also involved in some cases.

Protection against such injuries has as yet not been adequately solved. Ordnance experts claim that putting silencers on guns of large caliber is impractical and would cut down on their efficiency. As yet no ear protector has been devised that works satisfactorily. Our troops prefer to use dry cotton to the exclusion of all others which has been found to be ineffective in stopping detonation waves.

Auditory Sense: The auditory pitch range of human hearing is generally stated

to be from 16 double vibrations (dv) to 16,000 dv. Other limits to this range have been assigned by various investigators from as low as 12 dv to 40,000 dv. With few exceptions adults, especially in later life, find difficulty in hearing much over 10,000 dv. Children find it easier to hear the upper limit. There is a normal decline in hearing acuity with advancing age which mainly affects the higher tone limits, as first shown by Bunch. The human ear does not respond equally throughout the various frequencies but is more sensitive to the middle range of pitch which includes the human speech range and the common sounds of daily life. In other words, the human ear can hear a much fainter sound at 512 or 1024 dv than at 40 dv or at 10,000 dv. This characteristic of the human ear is not the thing to be measured, however, but rather the variation from normal sensitivity.

The human ear lke the eye also has a protective mechanism. This permits the extreme sensitivity to infinitisimally faint sounds while protecting the delicate hearing organ from terrifically loud noises. In other words, the nearer the sound loudness is to the threshold of hearing the smaller the increase in sound loudness necessary to be perceived by the ear as a definite change.

The unit of intensity or loudness as perceived by the human ear is designated as the decibel or sensation unit. It represents the smallest change in intensity that the human ear can appreciate. It is a logarithmic unit in which ten decibels would correspond to a ten-fold increase in sound intensity, 20 decibels to a hundredfold, 30 to a thousandfold, etc. There are considered to be about 130 units in the decibel scale from the threshold of audibility to the threshold of feeling or point where the sound is so intense it becomes painful. For all medical and scientific purposes hearing loss is expressed in decibel loss, either the average loss or the specific decibel loss for any given frequency.

Functional Tests of Hearing: Given a case of defective hearing it then becomes necessary to determine the type, location and the degree of deafness. This has added significance in the military service as Army Regulations specify certain ear conditions and limits of hearing acuity as causes of rejection.

Various aids are available and have been used to determine the type, location and the severity of deafness. The most common and the most practical is the spoken voice or whisper. Since it is a final test as a means of communication it is the one in which the patient is most vitally interested. Being of limited range it falls short of determining the qualitative type of lesion. Variations in the voice of the examiner also make it unsatisfactory. The tuning forks have an increased value over the spoken voice because they are standard. The range of the usual set available, however, is also limited, especially for the higher tones. They are not of much value when the hearing loss is fifty per cent or more. The watch test is far inferior to other tests and is mentioned only because of its common use. The Politzer acoumeter is accurate but of value for the measurements of the high tones only. The audiometer has added greatly to the accuracy and scientific value of hearing tests. The vacuum tube type, the one generally used at present, can produce a continuous range of frequencies from as low as 32 dv to 16,384 dv. The tones are pure and can be varied both in pitch and intensity. Once the use of the instrument has been learned accurate tests may be made by office assistants or nurses. The data obtained is recorded on a graph which can be readily interpreted and a tentative diagnosis made simply from the graph, which gives both quantitative and qualitative information. The tests may be repeated at intervals and progress of the disease visualized. Both air and bone conduction can be tested.

The four most important functional changes in making a differential diagnosis are: 1. Elevation of the lower tone limit; 2. Prolonged bone conduction; 3. Reduced upper tone limit; 4. Loss of hearing by bone conduction. The first two are present as is well known to all otologists when the lesion is confined to the sound-conducting apparatus. There will be a definite loss of hearing for the lower tones while the perception of the high musical notes is not changed. It is present in stenosis of the Eustachian tube, in chronic catarrhal otitis media or as a result of the occlusion of the external auditory meatus. Prolongation of bone conduction may be determined by the Rinne test, which is then referred to as negative, and the Schwabach test. The latter two functional changes present in diseases confined to the perceptive apparatus, namely the labyrinth or the auditory nerve. Again decreased bone conduction may be determined by

the Rinne and the Schwabach tests. Determination of the lower and upper tone limit is made with the tuning forks, the monochord, the Galton whistle or the audiometer. A confirmatory test of limited value in unilateral deafness is Weber's test, the sound of the tuning fork being lateralized to the deaf ear in conduction deafness and to the sound ear in nerve deafness.

Simulated Deafness: Whenever compulsory military duty becomes necessary the otologist and the medical officer are confronted with the problem of simulated deafness. The question of malingering also arises in legal cases where compensation and damages are involved. Usually unilateral deafness is simulated as it may have existed without knowledge to the patient, whereas bilateral deafness would certainly have attracted attention.

Various tests have been devised for detecting a malingerer. The audiometer is effective for this purpose. Repetition of the audiogram will expose any attempted simulated loss as no malingerer can accurately recall intensities at various frequencies and reproduce comparable graphs.

The Lombard test or voice level test utilizes the fact that when in unilateral deafness a noise maker is applied to the good ear the patient will reflexly elevate the pitch of his voice while reading aloud some selected paragraph. This will not occur if he hears with the other ear.

The stethoscope test is commonly used in simulated unilateral deafness. A common bell-type stethoscope is applied to the patient's ears with the tube leading to the normal ear obstructed with cotton or wooden plug. The physician now speaks into the bell having the patient repeat what he says. The instrument should then be removed and the normal ear closed tightly and the procedure repeated. He will then say that he cannot hear since his good ear is now obstructed whereas he has already heard with the suspected ear, the tube leading to the good ear having been closed off in the first part of the test. There are several modifications to this test.

Stenger's test is also used for simulated unilateral deafness. It is based on the fact that a preponderance of sound of a certain pitch in one ear eliminates the perception for sound of the same pitch in the opposite ear. The patient is blindfolded and two forks of the same pitch are used. The hearing distance of the good ear with one of the forks is first determined. It is then held one inch from the suspected ear, the sound of which will be denied. The other fork is struck and gradually brought toward the good ear. With equal hearing in both ears this fork will not be heard in the alleged good ear until it is about an equal distance, namely one inch, from the ear, whereas it will be heard much farther away if the opposite ear is deaf.

In bilateral deafness a modification of the Lombard test is used with a noise-maker in both ears while the patient is reading aloud. An elevation of the voice exposes the malingerer.

The cochleo-palpebral test of Gault may be used in simulated bilateral deafness. A sudden unexpected loud noise is made before the patient. If hearing is present there will be noticed a perceptible flickering of the eyelids.

Conclusion: Here at Fort Knox among the recruits and replacements who are seen at the Ear, Nose and Throat Clinic, the complaint of deafness is common. The defect is soon recognized when they begin training, and they are immediately sent into the Clinic for examination.

About 250 new ear cases are seen every month in the Ear, Nose and Throat Clinic, 20 to 30% of which have a complaint of chronic deafness. About 20% of these have a deafness severe enough to be disqualifying for any type of Army service and must be discharged from the Army. The defect in these cases is obvious, with definite objective findings and positive history.

The expense entailed by the Government can be readily appreciated as these men are of no use to the Army and have been paid, clothed and fed during their entire enlistment which is spent mostly in the hospital.

Through The Skin: That some of the vitamines and hormones are absorbed through the skin and thus enter the system is known to every doctor. But what of other medicines? Drs. Franz Herrmann, Marion B. Sulzberger and Rudolf L. Beer describe in Science a whole series of compounds which can be applied externally and which they dub "penetrasols." The compound that penetrated most rapidly and deeply contains antipyrine, xylene and some sulfonated wetting agents. The penetrasols are carriers of the actual medicines, such as the sulfa drugs.

INFLUENZAL MENINGITIS
REPORT OF A CASE

E. P. Scott, M. D.
Louisville

B. C., age 7 months, Willisburg, was admitted to the Children's Free Hospital, December 27, 1942, with the chief complaint of "convulsions."

According to the mother the child became ill with pneumonia four weeks prior to admission. The mother stated the child had a rapid recovery, but later had a relapse of pneumonia; however, he apparently recovered without complications.

One week prior to admission he developed diarrhea. The first convulsion, which was described as generalized, was noted six days before admission and according to informants lasted two hours. The parents denied any further convulsions until the morning of admission, at which time he had a generalized convulsion that lasted one hour.

During the entire illness the patient had been cared for by the family physician.

The past history was essentially negative except there had been a definite exposure to pertussis two weeks prior to present illness. The infant is breast fed and no other feedings have been added to the diet.

His development is consistent with a seven months old child as he is just now sitting alone.

The mother, age 25, and the father, age 31, are both living and well. There are three other children, age 7, 5 and 2, who are reported to be in the best of health. One brother died of pneumonia at the age of five. There is no history of tuberculosis, syphilis, or allergy present in any of the family.

The physical examination revealed a well developed and well nourished, white, male who did not appear acutely ill. The temperature was 101° F. with respirations of 64 per minute. The weight on admission was 15 pounds and 10 ounces. Aside from a soft systolic murmur at the apex of the heart the complete physical examination was recorded as not remarkable.

The initial white blood count was 33,600 per c. m. with a differential of 85% polymorphonuclear leucocytes, 13% lymphocytes and 2% monocytes. The red blood count was 2,284,000 with 8 grams of hemoglobin per 100 cc. The urinalysis was essentially negative.

He was given the usual routine treatment for diarrhea which consisted of 12 hours starvation, followed by a buttermilk and banana diet. He was also given sulfathiazole calculated to be a grain and one-half per pound of body weight.

The next morning, December 28, his temperature was 101° F. with respirations of 30 per minute. It was now noted that his anterior fontanelle was tense and therefore a lumbar puncture was done which revealed opalescent fluid, a total white blood cell count of 357 per cu. mm. with 51% lymphocytes and 49% polymorphonuclear leucocytes. The globulin was recorded as a faint trace and the stained primary spinal fluid smear revealed gram negative pleomorphic organisms morphologically resembling the influenza bacillus. The spinal fluid sugar was below 40 mgm. per cent, total protein 133 mgm. per cent and chlorides 759 mgm. per cent.

The medication was immediately changed to sulfapyridine; after two doses it was discontinued and sulfadiazine was given orally one gram immediately and one-half gram every four hours, which figured 3 grains per pound of body weight. He was also given 150 cc. of citrated blood intravenously.

On December 29, at 7:00 P. M. a repeat lumbar puncture revealed a cloudy spinal fluid, sugar to below 40 mgm. per cent with a total protein of 100 mgm. per cent. The total white blood cell count was 380 per cu. mm. with a globulin of one plus. By this time the spinal fluid culture revealed Type A hemophilus influenza. Therefore, after a negative skin test with horse serum, 15 cc. of Mulford "Lyovac" anti-influenza bacillus serum was administered intramuscularly, intrathecally and intravenously. This was followed by a second transfusion of 150 cc. of citrated blood.

The following morning, December 30, a lumbar puncture was repeated which revealed cloudy spinal fluid, sugar below 40 mgm. per cent, protein 250 mgm. per cent and a white blood cell count of 2,352 with 72% lymphocytes and 28% polymorphonuclear leucocytes. The globulin was four plus. The free sulfadiazine of the spinal fluid was 10.39 mgm. per cent and the free sulfadiazine of the blood was 8.99 mgm. per cent. The anti-influenza serum was repeated 15 cc. intramuscularly, intrathecally and intravenously.

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At 9:00 A. M. December 31, another lumbar puncture was done which revealed opalescent fluid, sugar below 40 mgm. per cent, protein 180 mgm. per cent and a white blood cell count of 1,390 with 63% lymphocytes and 37% polymorphonuclear leucocytes. The globulin was two plus. The free sulfadiazine of the spinal fluid was 6.15 mgm. per cent and the free sulfadiazine of the blood was 6.74 mgm. per cent. Again the anti-influenza serum was given intravenously and intramuscularly. A third transfusion of 150 cc. of citrated blood was given intravenously. At 9:00 P. M. the same day the anti-influenza serum was repeated 15 cc. intravenously and intramuscularly. This was repeated January 1.

A lumbar puncture was repeated January 2 which revealed cloudy spinal fluid, sugar below 40 mgm. per cent, protein 150 mgm. per cent and a white blood cell count 998 with 68% lymphocytes and 32% polymorphonuclear leucocytes. The globulin was a slight trace. The free sulfadiazine of the spinal fluid was 11.41 mgm. per cent and the free sulfadiazine of the blood was 10.03 mgm. per cent. A fourth transfusion of 140 cc. of citrated blood was given intravenously. Due to transportation difficulties no serum could be obtained for this day. However on the morning and evening of January 3 the serum was again given.

January 4, another lumbar puncture was done which revealed much clearer fluid than the previous lumbar puncture. The sugar was below 40 mgm. per cent, protein 105 mgm. per cent, and a total white blood cell count of 850 per cu. mm. with 21% polymorphonuclear leucocytes and 79% lymphocytes. The globulin was a faint trace. The free sulfadiazine of the spinal fluid was 7.66 mgm. per cent and the free sulfadiazine concentration of the blood was 8.30 mgm. per cent. A fifth transfusion of 150 cc. of citrated blood was given intravenously and 15 cc. of anti-influenzal serum was repeated intravenously and intramuscularly.

As yet there is no growth on the blood culture, but all spinal fluid cultures are reported as positive.

Roentogram of the chest taken shortly after admission was interpreted as negative for pneumonia. Three urinalyses have been negative.

He has been changed to an evaporated milk formula and his present weight is 16 pounds and 13 ounces.

There have been several mild convulsions which have been controlled by phenobarbital. The temperature has ranged from normal to 104° F.

There has been given a total of five transfusions and 330 cc. of serum.

The sulfadiazine concentration of the blood has ranged from 10.03 to 6.74 and the spinal fluid from 10.39 to 6.15 mgm. As to the prognosis we are hopeful.

It is common to find the type A in the respiratory passages and very rare to find it in the spinal fluid; this being the second case recorded at this institution. Usually the Type B invades the spinal fluid.

This common type of meningitis is a specific bacterial type and not a virus infection. Males are more likely to be affected than females and its incidence is highest during seasons of respiratory infection.

As there is no definite clinical pattern, delayed signs and symptoms make the diagnosis difficult.

Huntington and Wilkes-Weiss report a series where 10 of 42 patients with influenzal meningitis developed the signs of meningitis after admission to the hospital, and that over half of the patients had otitis media or pneumonia upon admission to the hospital.

In regards to serum, Wollstein (1911) prepared anti-influenzal serum by immunizing goats. Later a horse anti-serum was used and the specific rabbit anti-serum was developed by Alexander. These in combination with sulfonamides, have reduced the mortality rate of this disease.

Since another case (Scott and Bruce J. of Ped. Vol. XX, April 1942) from this institution was treated successfully with anti-influenzal rabbit serum, type B., sulfadiazine was elected as the sulfonamide of choice in this case. It is believed to be most successful when the sulfonamide concentration of the spinal fluid is above 10 mgm. per cent. Other reasons for using sulfadiazine instead of any other sulfonamide is that there seems to be fewer toxic side effects; there is definitely less nausea and vomiting, and the sulfadiazine seems to enter the spinal fluid more readily, therefore a higher concentration.

We are using a dosage of three grains of sulfadiazine per pound of body weight which seems to be giving us the approximate spinal fluid sulfadiazine concentration.

The serum used is prepared by Sharp

& Dohme by immunizing horses using selected strains of H. influenza recently isolated from cases of influenzal meningitis and acute respiratory infections.

The serum is desiccated by a rapid freezing and dehydrating process known as "lyophilization" and is contained under a vacuum sealed ampule. The dried serum is put into solution with distilled water.

The literature suggests the serum be given as soon as the diagnosis is made, intravenously, intrathecally and intramuscularly. The intravenous and intramuscular administrations are repeated every eight hours for two or three days, then every twelve hours for two or three days, and then once daily for several days. Treatment should be continued until three successive cultures of the spinal fluid are negative.

DISCUSSION

Virgil Simpson: What conclusion have you reached from cases and the literature concerning the cause of influenzal meningitis? Do you consider that the organism has been definitely determined?

E. P. Scott: In the literature, one learns this organism is a definite entity, just as the pneumococcus. There are two types, a and b. As far as I can tell from the literature, the infection is similar to that of the nose and throat and it is a gram negative organism.

Austin Bloch: I should like to ask something about the laboratory technic of typing the organism. Is a mouse inoculated? What source of organisms is used? Are they agglutinated?

E. P. Scott: I am under the impression that it is a capsular swelling they use.

Control of tuberculosis under conditions of war challenges all available resources. The medical history of World War I reveals to us how mortality rates for tuberculosis increased greatly during the war and some years thereafter, especially in Europe. The massing of armed forces for training purposes, mixing individuals from areas of high tuberculosis prevalence with those from areas relatively free of the disease, confronts the military establishment as one problem in tuberculosis control. The concentration of families of industrial workers in defense and cantonment areas, under unhygienic living conditions where sanitation is limited or absent, presents another terrific public health problem. Unless national efforts are directed towards combating these specific factors in the tuberculosis problem, we may well expect an upward trend rather soon in the tuberculosis mortality curve for the United States.

SPINAL ANESTHESIA WITH PONTOCAINE

Sam S. Clark, M. D.
Louisville

The first spinal anesthesia was the result of self experimentation by Dr. August Bier in 1898. He permitted the injection of 2 cc. of 1% Cocaine into his own spinal canal and observed the adequate anesthesia of his legs that resulted. He later introduced the method into his surgical practice.

Since that time, the search for a better spinal anesthetic agent has continued unceasingly. A great many drugs have been tried, many have been discarded, and the remaining ones leave much that is desired for the perfect anesthetic agent.

Should the perfect anesthetic drug be discovered, it would certainly have the following attributes as well as many others. It should be a non toxic anesthetic substance which when introduced into the spinal canal would produce complete surgical anesthesia on the desired region without endangering the life of the patient. The level of anesthesia should be easy to control; the duration of anesthesia should be variable to suit the operation; the depressent effect should be minimal; and undesirable side effects should be absent.

Among the anesthetic agents which have been used at the Louisville General Hospital, the one which satisfies most of these requirements is Pontocaine. This comparatively recent synthetic local anesthetic drug is similar in structure to Novocaine. Chemically it is p-butylamino benzoic acid dimethylamino ethanol. It is commonly used in the form of the hydrochloride, which is a white powder freely soluble in water, saline or spinal fluid. The resulting solutions are stable and resist prolong boiling. Its efficiency is equal to Cocaine, while its toxicity is considerably less, it produces rapid surface anesthesia of mucous membranes on topical application. It is furnished in 2 cc. ampules containing 29 mgm. of Pontocaine dissolved in saline. Its sp. gr. is 1.0068 which approximates that of average final fluid. Its potency is about 10 x that of Novocaine; the maximum dose should not exceed 25 mgm.

Experimental and clinical experience indicates that the lethal dose results in

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respiratory failure rather than cardio-vascular collapse. This facilitates resuscitation in case of toxic effect. The incidence of respiratory failure in the human seems to be the result of attempting to carry the anesthesia too high; and in not exercising the proper precautions in preventing gravitation when the patient is placed in the Trendelenburg position.

The generally accepted technique for use of Pontocaine is that introduced by Dr. Lincoln F. Sise of Lahey Clinic of Boston. In order to make the normally isobaric solution of Pontocaine more easily controllable, Dr. Sise devised the plan of mixing 10% Glucose solution with Pontocaine, thereby making it much heavier than spinal fluid, and directly influenced by gravity. Our work has been done entirely by the Sise technique.

Basically spinal anesthesia with Pontocaine differs little from that utilizing any other drug. After spinal anesthesia has been decided upon as the indicated anesthesia, the patient should be properly premedicated with appropriate doses of barbiturates, Morphine and Scopalamine. With the patient in the lateral decubitus position, the legs should be flexed upon the abdomen, and the head flexed on the neck, with the shoulders perpendicular to the table. The spinous processes of the vertebrae are then palpated and the appropriate lumbar interspace, usually the third, is chosen. Under sterile precautions the desired doses are then prepared, a vasoconstrictor, ephedrine 50 mgm. or neosynephrine 2.5 mgm. is incorporated with the 1% novocaine for skin anesthesia. The pontocaine solution is then measured and an equal volume of 10% glucose solution is added. These should be well mixed to insure a uniform solution. The spinal tap is then done, and when a free flow of clear spinal fluid is obtained the pontocaine-glucose mixture is injected at a rate of about 1 cc. every 5 seconds. If upper abdominal anesthesia is desired, it is advisable to place the table in 5-10° Trendelenburg position before injecting the pontocaine-glucose solution. This insures adequate height of anesthesia. Immediately after removing the spinal needle the patient is placed in the dorsal position and a pillow large enough to sharply flex the head and neck is placed under the patient. If the operating table has not been placed in Trendelenburg position, it should now be done, and the patient is tested for level of anesthesia. This is best accomplished by first applying the stimulus well above the expected level of anesthesia, then testing from below upward until the patient reports the exact sensation as first experienced. When the anesthesia has reached the proper level the table is leveled, or if the flow has been unusually rapid, slight reverse Trendelenburg is indicated. It should be kept in mind that the sensory anesthesia is 1-2 segments higher than motor anesthesia. In the majority of cases, the anesthetic dose is fixed by the nerve tissue in 10-15 minutes. At the end of this time the Trendelenburg position may be reassumed if desirable. It is wise to continue to test for increasing height of anesthesia for the first 30 minutes of the operation if the dose has been relatively large, and the table leveled or put in reverse Trendelenburg if the anesthesia shows signs of gravitating upward. In upper abdominal work a slow upward drift involving only sensory anesthesia has been observed if the patient is kept in Trendelenburg. This can be explained on the basis that the heavy solution drifts upward along the posterior nerve roots, without noticeably affecting the motor nerve roots. It is not uncommon to see skin anesthesia to the nipple line with the lower incostal muscles fully active.

Clinically pontocaine is less toxic than other spinal anesthetic agents used at the Louisville General Hospital. Depression of the cardio-vascular system, as evidenced by fall in blood pressure, indicates that pontocaine is less toxic. In 110 consecutive cases varying from upper abdominal anesthesia to rectal and perineal anesthesia, not one case of third degree cardio-vascular depression occurred. The average fall in blood pressure is 30% of the control level taken before anesthesia is induced. In contrast to other agents used this fall is not precipitous, and in the majority of cases the blood pressure regains the control level before the operation is complete, providing the surgery has not been too extensive. The fall in blood pressure reaches its maximum about 30 minutes after induction of anesthesia. The fall follows a smooth curve with the rate of fall between 5-10 mm. of mercury in 5 minute periods. The extremely slow pulse rate of 40-60 per minute commonly seen with other anesthetic agents has not been observed with pontocaine. Should the advisability of cardio-vascular stimulation arise during the pontocaine anesthetic,

the response to moderate doses of vasoconstrictor drugs is more prompt and the action prolonged. Either ephedrine 50 mgm. or neosynephrine 2.5 mgm. are quite satisfactory stimulants. In cases where shock seems impending due to trauma or loss of blood a combination of Ephedrine 25 mgm. and Pitressin ½ cc. seems to be superior to other stimulants.

The nausea and vomiting which occur during laparotomy does not occur as frequently with Pontocaine as with other anesthesic agents. This can be explained by the slower rate of fall of blood pressure, and the lower degree of systemic toxicity of the drug. In cases of upper abdominal operations such as gastric surgery which are so frequently accompanied by these undesirable side effects, little improvement has been noted. However, we feel that the nausea and vomiting accompanying this surgery is largely reflex in origin due to traction on the mesogastrium. Light supplementary anesthetic with Sodium Pentothal easily controls the patient's discomfort and the hindrance to the surgeon.

The duration of anesthetic with pontocaine approximates that of spinal anesthetic with metycaine-nupercaine, and is considerably longer acting than novocaine. Anesthesia of 1½-2hrs. with average doses of pontocaine is the rule, with larger doses this can be slightly increased. We have found administration of morphine sulphate grs. 1-6—1-4 to patients who have vague complaints of pain and are restless, sufficient to prolong anesthesia when a few minutes will suffice to complete an operation. The intravenous route is indicated for this medication.

The percentage of failure of anesthesia with pontocaine has been extremely low. Only two cases of the 110 considered could be called failures, and in both of these incomplete anesthesia was present; however, supplementary anesthesia was required before surgery could be started. The small amount of sodium pentothal required to control these cases indicates that partial anesthesia was present. The ability to control the height of anesthesia has greatly reduced the number of cases requiring supplementary anesthesia, as well as being a safety factor of no small importance.

Summary

Spinal anesthesia with Pontocaine has been discussed, and the Sise technique briefly presented.

Clinical observations on the toxic effects of Pontocaine spinals in 110 consecutive cases have been presented, and some of the advantages discussed.

DISCUSSION

Irvin Abell: Have you tried any of the continual spinal anesthesia? Do you rely entirely upon ephedrine? Have you used pectin?

S. S. Clark: Three, since July 1. They worked quite well. We feel that the rigmarole we have to go through to get it started isn't worth all the trouble. With borderline cases, we use general anesthesia. We have not used pectin, we use 5% saline and glucose, and always have blood or plasma for use.

J. W. Moore: How do you diagnose early cases of shock? What is the pulse rate? Does the venous pressure fall?

S. S. Clark: The rising pulse is the first sign of shock. We take pressure and pulse every five minutes. If the pulse starts a slow rise of 6-8 in five minutes and the pressure falls 5-10 mm. Hg., we have a good idea that the patient is going into shock, especially if he has lost a great deal of blood or the surgery has been extensive or the handling rough, no venous pressure has been determined. Shock with a slow pulse is not frequently seen with pontocaine; however, falling blood pressure with a slow pulse is regarded as impending shock.

SKIN GRAFTING

Alvin B. Ortner, M. D.
Louisville

For the past two years at the Louisville General Hospital, and for the past six months at the Children's Free Hospital, calibrated thickness skin grafts cut with the Padgett Dermatome have been used in nearly all cases where skin grafting has been necessary.

This method has not only given highly satisfactory results, both on aseptic denuded areas and on clean granulating surfaces, but has proven to be technically very simple.

To obtain optimum results in skin grafting, certain fixed principles must be adhered to, as well as considering each case individually.

Every effort should be exerted to bring the patient into the best possible condition. If this is neglected, failure of a successful take will frequently occur in an otherwise perfectly executed graft and, further, will occasionally be responsible for, or contributory to, the death of the patient. Anemia, dehydration, hypoproteine-

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mia, and avitaminosis are four of the frequent findings in these cases, especially those with large granulating areas resulting from burns.

Vascularization of a graft is dependent on the adjacent underlying tissue and in the presence of anemia and dehydration, new capillary formation into the graft is impeded. Should these conditions not be corrected preoperatively, they are further augmented by the loss of blood and tissue fluid from the donor site, hence further impeding the vascularization. Also, if the dehydration and anemia be too profound, may result in the death of the patient.

Ravdin, in his work on wound disruption, has shown that wound healing and tissue repair are retarded in the presence of hypoproteinemia. This is especially true in grafting, where the blood supply to the graft is temporarily disrupted. One could hardly expect a good take when planting a graft on edematous, hydropic granulations. It should be stated further, here, that if the patient is dehydrated the plasma proteins may be normal, but after hydration a hypoproteinemia exists.

A definite relationship has been found to exist between wound healing and vitamin C intake and should this vitamin be withheld, wound healing is impaired. Further, an adequate amount of the other vitamins is necessary in the prophylaxis of infection and these should be amply supplied to help assure success.

The location of the recipient area and the type wound should be the next considerations. The factors here are: Mobility of the area, the cosmetic result necessary, and the vulnerability of the area to trauma; viz., a weight-bearing surface or frequently used surface such as the palmar aspect of the hand.

Mobility of the Area: In an area where a large amount of mobility is necessary for good function, i.e., the axilla or anterior cervical region, it is desirable to use graft in which there is a minimum of contraction of the skin. In such cases, a full thickness graft is the most desirable of the free grafts, because contraction of grafted skin is proportional to the thinness of the graft. However, the difficulty in obtaining a satisfactory take is a definite disadvantage. To overcome this, Blair and Brown, some years ago, presented a split skin graft taken through the middle third of the skin, and Padgett later described a three-quarter thickness graft which is taken at a lower level but still above the lower limits of the corium. These grafts on aseptic denuded areas are hardy and good takes are obtained with a minimum of contraction.

In areas that are relatively immobile and maximum cosmetic result is not of prime importance, but the simple coverage of the surface is the greatest consideration, the thin graft as described by Thiersch, is of most value, the main advantages being that a take is almost certain and that large areas may be transplanted with relatively little injury to the recipient area.

Cosmetic Result: In exposed areas, especially the face, optimum cosmetic result is desired; hence, a thick split graft is again of value. The reason underlying this is another of the properties of grafted skin, that being, the thicker the transplant the greater the tendency of it to retain its normal appearance.

Surfaces Vulnerable to Trauma: Here again the thicker the graft the more satisfactory the functional result. Thin grafts on weight bearing surfaces erode and ulcerate easily and frequently must be replaced by thicker skin.

The next consideration following the site, is the condition of the recipient area. If it is a cicatricial contracture which is to be excised, giving an aseptic denuded area, the full thickness, intermediate split, or thin graft may be used, depending on the location and function.

If it be a clean granulating surface, then a full thickness should not be considered, as chance for a take of a full thickness graft over a granulating wound is negligible.

If the area is immobile and coverage of the greatest importance, a thin graft should be used. Should the area be mobile or cosmetic result desired and the granulations are unimpeachably clean, the split graft of Brown and Blair or the calibrated three-quarters thickness as described by Padgett may be used. If the granulations are not absolutely healthy and further scarring is to be avoided, which will occur during the period necessary to bring the granulations into condition, an advisable method is to use the thin graft and later excise this and work on an aseptic denuded area.

The majority of grafting we have done has been on granulating areas following the treatment of burns. The remaining portion of this paper is devoted to the pre-

operative and postoperative treatment of these wounds, with a consideration of the technic of grafting and the thickness of skin used.

If the burn has been treated with tannic acid or any drug producing an eschar, this eschar is not disturbed unless infection appears under it, or it begins to separate. Once separation occurs or infection is present, every effort is made to remove the eschar as soon as possible, so that if grafting is necessary, it may be done at the earliest moment so as to minimize scarring with its resultant contractures and deformities.

The loose eschar is debrided and continuous moist compresses of saline or Dakin solution begun. On subsequent days the patient is given tub baths and any loose eschar is debrided, if possible, during the tubbing or immediately following the bath. During the remainder of the day the moist compresses are continued. When the entire eschar, or the greater portion of it, has been removed, the moist compresses are discontinued and medium mesh gauze is applied and curtain drainage, as has been described by Gurd, with 5% sulfathiazole emulsion, is instituted.

When there is no frank pus or slough present and the granulations are a cherry red and appear healthy, saline compresses are again instituted for 12 to 24 hours prior to grafting. Bacterial cultures, smears, or colony counts are not done because in the past we have not found them of value.

If the granulations are edematous or exuberant, a pressure dressing is applied for 48 to 72 hours. On removal of the pressure dressing there is usually a collection of purulent exudate. If the granulations are sufficiently down, then curtain drainage is again instituted until there is no frank pus. If the granulations are not sufficiently compressed, a new pressure dressing is applied. The use of an elastic bandage over the dressing gives quite satisfactory pressure.

The type and thickness of the graft is chosen immediately preoperative. In an adult, if a thin graft is to be used, it is calibrated on the Dermatome from .010 to .014 inch. If a split graft is used, the calibration is from .014 to .020. The variation in thickness in the two types of grafts being dependent on the sex of the individual (the female usually having thinner skin,) the location and size of the recipient area, the region of the donor area, and the condition of the granulations

We prefer, when possible, to use the sheet graft, because these result in less cicatrix formation and contracture; however, if the granulating surface is not optimum or is too large to completely cover with sheet grafts, but we wish to cover it as soon as possible to prevent scarring, the sheets taken with the Dermatone are cut into squares the size of postage stamps.

When using sheet grafts, these are sutured in place with fine silk about the edges and multiple stab wounds are made in them to allow escape of serum from the covered surface. The "postage-stamp" grafts are not sutured in place.

After the graft has been planted, it is covered firmly with medium mesh gauze, over which several layers of dressing are applied. This is entirely covered with an abundance of sterile mechanics waste in which sterile perforated tubes are implanted, with one end projecting. The entire dressing is then wrapped snugly with gauze. If the grafting is at or near a joint, a splint is then applied.

For the first 24 hours the dressing is not disturbed. After this initial rest period, the projecting end of the perforated tube is attached to a Murphy drip outfit and sterile physiologic saline is allowed to drip into the dressing slowly. This is continued for 4 days. If, at any time, a pyocyaneus infection is detected, this being a frequent contaminate, 2% acetic acid is substituted in the drip for the saline, or the drip is alternated, saline and acetic acid being used at intervals.

After five days, the original dressing is removed except the mesh gauze, which is not disturbed. Curtain drainage is then instituted again, using the 5% sulfathiazole emulsion until healing is near or complete.

High Blood Pressure—Some striking results in the treatment of high blood pressure have been obtained by administering to experimental animals and human patients extracts from raw pork kidneys. The active principle of the kidneys is called renin. But the chemical nature of renin is still a mystery. In the Proceedings of the Society for Experimental Biology and Medicine, Drs. Meyer Friedman, H. E. Krueger and A. Kaplan (Mount Zion Hospital, San Francisco, Calif.) report that they injected purified renin into three dogs with high blood pressure with no positive results. This does not mean that the hog-kidney extracts with which success was obtained are useless. Probably they contain some undiscovered factor which does reduce high blood pressure.

THE AMBULATORY TREATMENT OF SACROILIAC DISEASE

Clark Bailey, M. D.
Harlan

Injuries or sprains in the sacroiliac and sacrolumbar regions are among the most disabling of the minor injuries to the human body. The importance of such injuries is emphasized by the frequency of such cases seen in general and surgical practice. This is especially true in industrial practice, farm labor, and in any type of labor which requires heavy lifting. The so called industrial age presents so many more instances of low back injury than formerly seen. A review of a greater number of cases examined and a more enlightened conception of the condition is, therefore, possible.

A sprain or dislocation of the wrist, elbow, shoulder joint, ankle or knee may be painful and for a time disabling but as a rule presents very little difficulty in regard to diagnosis or treatment unless complicated with adjacent injuries. The opposite is true, however, when sprains of the sacroiliac or lumbosacral joint is present since in acute strains movement of the body may be so painful that the patient is disabled for weeks and recovery tedious. As a rule, the diagnosis of sprains of the sacroiliac and lumbosacral regions are the most complex and the treatment the most unsatisfactory of any place in the human body. Many cases of low back strains recover without any treatment while others may become chronic or recurrent and exhaust the armamentarium of the most capable and resourceful of physicians. I suspect that the patient is less satisfied with the results of treatment of the low back strain than most any of the minor conditions.

The mechanism of traction and counter-traction, adduction and abduction, flexion and extension, and rotation about a transverse axis, not in a vertical plane, combine to perform the functions of one of the most important joints in the body, the sacroiliac. Most injuries in this region not due to direct trauma result from bending, stooping, lifting, or pushing while the body is tilted to one side or the other, such as pushing a mine car or auto, turning a wheel-brake on a railroad car, chopping wood with an ax while the body is twisted. The vertical plane of the body must be maintained while the sacroiliac and lumbosacral joints are in undue stress. Otherwise, the acute and immediately disabling subluxation with ligament tear characterized by sudden onset, inability to bear weight on the affected leg, and excruciating pain may result. A continued strain will finally involve the nerve roots and present an even greater problem.

The subacute or chronic type in which there is a gradual stretch of the ligaments due to occupational strain, as in the constant riding in automobiles and trucks or other similar conditions, may be slow and insidious in onset. The history of trauma is usually obtained both in the acute and subacute types. The severity of the injury may bear little or no relation to the severity or duration of the symptoms.

The history is especially important in industrial or medicolegal cases in which the element of exaggeration or malingering always has to be considered. A description of the pain, its location, duration, radiation and whether or not it was associated with trauma, or a twisting movement of the spine while bending over, is often essential in obtaining a lead in the case.

In a series of 2,050 cases studied at Steindler's Clinic, Miltner and Lowendorf classified the cases as follows:

Etiology	No. of Cases
Osteoarthritis	1050
Atrophic arthritis	300
Sacroiliac sprain	326
Sacrolumbar sprain	114
Combine sacroiliac and sacrolumbar sprain	85
Lumbar muscle sprain	100
Lumbar myositis (Myofascitis)	25
Spondylolisthesis	22
Fracture of the transverse process	14
Fracture of the articular facet	7
Fracture of the lumbar vertebra (undiagnosed)	5
Kummell's Kyphosis	2
Total Number of Cases	2050

Especially significant in this series of 2,050 cases of the cause of low back strain is the fact that more than half of them were due to some form of arthritis and that 1875 of the 2,050 were due either to arthritis or to sprains of the sacroiliac or sacrolumbar joints.

Since the above survey and many others since, substantiate the high incidence of arthritis as the most common cause, certainly after the second decade of life,

Read before the Kentucky State Medical Association, Louisville, September 28 - October 1, 1942.

an X-ray picture should be made in the beginning to rule out arthritis as a cause. The X-ray is the only certain way of diagnosing arthritis as a cause, as well as ruling out congenital abnormalities, fractures, and diseases of the bones. The X-ray is of no help in diagnosing displacements or sprains of the sacroiliac and sacrolumbar joints since the changes are largely ligamentous and do not show in the picture. A variable degree of chronic arthritis is almost always of the hypertrophic type and the prognosis must be guarded because of the tendency to chronicity and recurrence. An X-ray picture taken at the time of injury showing arthritis at the sacroiliac or lumbosacral joints will generally show arthritis in other areas of the spine showing that the arthritis is present long before the back is injured and maybe indirectly the cause of the injury. Frequently in compensation cases, the patient and counsel will contend that the injury is the cause of the arthritis when it is apparent that the "arthritic spine is more liable to injury than the one which is not arthritic. The average man of the heavy type who has done hard manual labor will show some X-ray evidence of chronic arthritis by the time he has reached forty-five years of age." The X-ray is also the only means of finally ruling out such conditions as displacements of the intervertebral disks from the third to the fifth lumbar spine, undiagnosed simple compression fracture of the vertebrae, fractures of the transverse processes of the vertebrae, fracture of the articular facets of any vertebra, coccygodynia, neoplasms, and spondylolisthesis. Therefore, the importance of an X-ray as early as possible in the course of the disease is unquestionable.

A careful history and physical examination is always essential.

On physical examination the entire back and hip should be exposed, any postural changes noted, and a notation made of any atrophies, muscle spasms, or areas of tenderness. The movements of the body should be observed with the patient standing, sitting, and lying.

The first thing to ascertain is whether or not the lesion is due to trauma and whether the symptoms are sacroiliac or sacrolumbar, and to rule out arthritis. It is often difficult to localize the lesion and to differentiate between the sacroiliac and sacrolumbar involvement and important to keep in mind that both areas may be simultaneously involved. Either type may present a history of pain in the low back, radiation along the distribution of the fifth lumbar, and first and second sacral nerves, that is, along the posterior and lateral aspects of the buttocks, thigh, and leg a chronic intermittent type of pain with a great variation in the degree of disability; a list, usually away from the side of the lesion with pain and muscle spasm and limitation of motion in the low back on standing.

In differentiating the two lesions, on sitting the patient has less limitation of motion in sacroiliac lesions than when standing, while in the sacrolumbar lesion the limitation of motion is about the same, sitting or standing.

The localization of the pain is one of the most important points in differential diagnosis. In the sacrolumbar strain the point of greatest tenderness is just above the mesial to the posterior superior spine of the ileum on the side of the lesion, while in the sacroiliac lesion the point of greatest tenderness is in the region of the posterior inferior spine of the ileum and the sacrosciatic notch.

With the patient in a supine position, compression of the pelvis in the anterior posterior or lateral plane may or may not cause pain in sacroiliac lesions, not in lesions of the sacrolumbar region.

Straight leg raising is usually more painful and motion more limited in sacroiliac than in sacrolumbar lesions.

On rectal examination it is always possible to demonstrate acute tenderness over the sacroiliac joint on the side of the lesion, while this finding is not present in the sacrolumbar lesion.

Goldthwaite's sign is elicited when the thigh on the affected side is flexed strongly and the knee is extended; this produces tension of the hamstring muscles, causing pain in the affected sacroiliac articulation.

After making a thorough history, physical, and X-ray examination and making a diagnosis of the type and location of the lesion the procedure of treatment best fitted for the individual case must be considered. The postural low back strains are treated by postural exercises and support to the low back by strapping with adhesive, low back brace, or sacroiliac belt in sacroiliac disease.

The traumatic low back strain may recover by rest in bed, local heat and massage, or strapping with adhesive. In some of the more intractable cases which do

not respond to the other types of treatment operative procedures may become necessary. In the severe cases immobilization by adhesive, Unna's plaster, or plaster cast for a considerable time may be necessary. The injection of procaine hydrochloride in the sciatic nerve or the paravertebral spaces sometimes gives marked relief of the pain and muscle spasm.

The use of various procedures of manipulation have undoubtedly given much relief to the patient and greatly shortened the course of the disease. Any manipulative procedure used should be done when the patient is first seen. Conwell's manipulation consists of "traction and countertraction assisted by a direct pressure on the pelvis by the surgeon."

The Travells recently described the "corkscrew" technic of manipulation and suggests that the displacements occur in only one direction. "It is a simple, safe measure which yields satisfactory results in the hands of any qualified, experienced physician. With the patient lying on the affected side, the maneuver forces the ileum upward with a corkscrew-like rotation of the sacrum on the ileum. The operator's right hand overlaps the sacrum and grasps the upper ischial tuberosity; the left hand grasps the front of the upper shoulder. The shoulder is pushed backward as the buttock is simultaneously forced forward and upward smoothly and steadily. When maximum rotation of the trunk is obtained, a quick final thrust is made. A click or series of clicks, apparently indicative of motion in the sacroiliac joint, is heard in most cases at the extreme limit of stretching, although satisfactory reduction is obtained occasionally without an audible sound.

The ultimate result in 162 cases of sacroiliac displacement subjected to this form of manipulative technique showed 128 (79%) cured, 26 (16%) improved, 3 (1.9%) unimproved and 5 (3.1%) outcome unknown. In most instances patients who did not respond to this technique had some complicating muscle disorder, a recurrence of the displacement with inadequate treatment, or were under too short a period of observation.

Other than increased soreness about the joint for one or two days following treatment no undesirable reactions were noted. Immediately following reduction the patient is urged to resume normal physical activity. No plaster cast or adhesive strapping is required; a tightly fitting elastic belt, exerting approximately a ten pound pull, may be worn well below the pelvic crest to constrict the pelvis and aid in recovery."

Procedures of manipulation such as those just described will give relief in the majority of traumatic cases of sacroiliac disease. Through their use it is possible to shorten the duration of the disease and the period of disability.

Conclusion

(1) Traumatic lesions of the sacroiliac and sacrolumbar joints are more frequent because of our present industrial age.

(2) Arthritis of some type is predisposing to a majority of all cases seen.

(3) The importance of the X-ray is emphasized in diagnosis of the disease and in examination for heavy industrial work.

(4) The differention of sacroiliac and sacrolumbar lesions is emphasized.

(5) Positive signs of diagnosis in sacroiliac lesions are less limitation of motion when sitting than when standing, the localization of the point of greatest tenderness in the region of the posterior inferior spine of the ileum and the sacrosciatic notch, pain or compression of the pelvis with the patient in a supine position, more pain and limitation of motion on straight leg raising, and almost always acute tenderness over the sacroiliac joint on the side of the lesion on rectal examination.

(6) The various methods of treatment are discussed when special emphasis on recently described procedures of manipulation which shortens the period of disability and makes the treatment of most of the cases ambulatory.

(7) Prevention of sacroiliac and sacrolumbar strains may be brought about by the teaching of the heavy worker not to lift when the body is tilted. The vertical plane of the body must be maintained while the sacroiliac and sacrolumbar joints are under great stress or strain.

DISCUSSION

David E. Jones, Louisville: The keynote of Dr. Bailey's paper, it seems to me, lies in his statement that the vertical plane of the body must be maintained while the sacro-iliac and lumbo-sacral joints are in undue stress. The very terms "sprain" and "strain" presuppose trauma at the extreme of motion in a joint, and the low back is no exception. Minor trauma is sufficient to produce severe pain and disability when a joint is used in complete flexion or extension and the stress falls entirely on the ligamentous structures. Hence, as was

pointed out, this applies to both acute and chronic sprains. Thus we find that even normal activity is sufficient to produce a lumbo-sacral sprain if a severe lordosis exists.

The series of cases reported by Milton and Lowdendorf was particularly interesting to me because it shows what I believe to be a common error in diagnosis. Out of 2,050 cases, 1,050 were classed as osteo-arthritis, and this diagnosis undoubtedly was made from x-ray findings based on the presence of spurs. It is my belief that spur formation indicates the presence of strain on a ligamentous attachment with the deposition of calcium at that point, probably nature's method of strengthening that attachment, rather than the presence of an arthritic process. Hence, most of this group of 1,050 cases should be classed as strains and sprains, bringing the total of such cases to approximately 1500. If this assumption is correct, then some 75 per cent of these cases were due to low back sprains and strains, and this points even more forcefully to the importance of diagnosis and treatment of these conditions.

Along the same line of thought, I must take exception to the statement that x-ray is the only certain way of diagnosing arthritis. In the early cases of arthritis, the inflammatory process involves only the soft tissues and no changes are visualized, so that diagnosis must be based entirely on the history and clinical findings. In the later cases, the process may be quiescent while certain joint changes are seen that may be misleading. However, I hasten to agree that x-rays are an invaluable aid in conjunction with the clinical picture in determining the status of the arthritic state and in ruling out other pathology.

The question of the case of low-back injury which shows arthritic changes by x-ray presents an interesting medico-legal problem. However, for the most part we can consider these cases as suffering from chronic strain or faulty mechanics previous to the injury, and we can definitely state that they are more subject to injury than those not showing such changes.

All low-back sprains and strains are injuries involving faulty mechanics or posture, whether it be habitual or momentary. Hence, repositioning of the low back is essential in treatment, whether by rest in bed, braces, casts, or whatever method. And in the same manner, teaching proper use of the back is not only one of the essentials of treatment but of prevention.

Dr. Bailey has already emphasized the necessity of teaching workers who do heavy lifting the importance of the proper use of the back. I would like to add the thought here that posture training in our schools could obviate at least 75 per cent of our low-back injuries.

The manipulative procedure described by Dr. Bailey and accredited to Drs. Travell and Travell is very interesting. It was my pleasure to be present at the original presentation of the Travells' paper and the demonstration of their work at that time. There is considerable contention as to their diagnoses of sacro-iliac displacement and as to what takes place with manipulation. However, their presentation in itself was very impressive.

In this regard I would like to say in relation to all manipulative procedures that this requires the utmost in surgical skill and judgment. No manipulative procedure should ever be attempted by one who is not thoroughly familiar with the anatomy of the part involved, the possible pathology, and with surgical principles in general. One cannot see what is being done as one can in surgery, but must feel and judge accurately what is taking place. There is a definite place in surgery for manipulation, but it must not be used indiscriminately or by those who are untrained, otherwise it will again revert to the same disrepute into which it has fallen through its use by the various cults.

This paper has been very much worth while, and I think Dr. Bailey is to be congratulated on his presentation of this problem. I am particularly pleased with the emphasis he has placed on the function of the spine and his realization that proper function will obviate the majority of such injuries and is necessary for their relief once they have been incurred.

There is really no effective treatment for the floating opacities which occur in high myopia. They are due to disorganization of the vitreous, apparently as a result of the increased size of the vitreous cavity, which necessitiates the passage of increased amounts of fluid into the vitreous gel. Such opacities in themselves do not affect vision and merely result in slight annoyance to certain persons. Such persons can only be reassured as to their harmless character. Opacities actually due to myopia must be distinguished from those occurring in chorioretinitis of infectious origin and from those which occur at the onset of retinal detachment. Careful fundus study should distinguish these conditions, each of which does require treatment. The atrophic fundus changes of high myopia must not be confused with those of chorioretinitis. While it is true that retinal detachment occurs more frequently in myopic eyes and that changes in the vitreous play a part in its development, it would seem wrong to alarm every patient who develops vitreous opacities by mentioning the danger of detachment.

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ANNUAL MEETING LOUISVILLE

OCTOBER 4-6, 1943

COUNTY SOCIETY REPORTS

Barren: Dr. C. C. Turner, President Elect of the State Society, died February 28, 1943.

The following members of the Society are in the armed services: Capt. John Dickinson, Hope, Arkansas; Capt. Rex Hayes. Camp Swift, Texas; Lt. G. P. Peterson, Australia; Capt. William Wells, Enid, Oklahoma; Major Paul S. York, Carlisle Barracks, Carlisle, Penn.

C. R. Markwood, Secretary.

Jefferson: The 861st stated meeting of the Jefferson County Medical Society was a dinner meeting at the Brown Hotel Crystal Ballroom with 215 members and guests present at the dinner and about 300 additional persons present for the program.

The President called the meeting to order at 8:30 P. M.. On motion duly seconded and passed, the regular business was dispensed with.

B. W. Smock introduced some of the distinguished guests present and then called upon Dr. O. O. Miller to introduce the guest speaker, Sister Elizabeth Kenny, a compatriot from New South Wales.

Sister Kenny outlined the history of the Kenny treatment for poliomyelitis and showed lantern slides and moving pictures of some of the cases.

At the conclusion of her talk, Dr. Irvin Abell spoke in commendation of her work and made a motion that Miss Kenny be made an honorary member of the Society. Motion was seconded and carried. The meeting was adjourned at 10:30 P. M.

Herman Mahaffey, Secretary.

Shelby: One of the most interesting and entertaining meetings of the Shelby County Medical Society was held March 25th at the Kings Daughters Hospital where Miss Bernice Holmes, the Superintendent, entertained the members and their wives with a delightful dinner.

The dinner was served promptly at 7 P. M. in the new Nurses Home with the recent graduating class of nurses aide serving. After the dinner Dr. Bell, the president of the Society, made a short talk and then turned the meeting over to Miss Holmes. Miss Holmes in turn introduced Miss Julia Poynter, the retiring president of the hospital board. Miss Poynter reviewed the work of the hospital from the time it was organized by the King's Daughters in 1903.

The following members were present: Dr. and Mrs. Alexander, Dr. and Mrs. Sternberg, Dr. and Mrs. Hughes, Dr. and Mrs. Beard, Dr. and Mrs. Allen, Dr. and Mrs. Skaggs, Dr. and Mrs. Carroll, Dr. and Mrs. Dowden, Dr. and Mrs. Weakley, Dr. and Mrs. Lapsley, Dr. and

Mrs. Bell, Dr. and Mrs. Mack, Dr. and Mrs. Risk, Dr. and Mrs. Nash, Dr. and Mrs. Blaydes, Mrs. Peters, Drs. Furnish, Bland, Sleadd, McMurry and Dr. and Mrs. Richeson.

The meeting adjourned at 9 P. M. Dr. Richeson will be the host at the next meeting on April 22nd.

C. C. Risk, Secretary.

Campbell-Kenton: The regular monthly meeting of the Campbell-Kenton County Medical Society was held at St. Elizabeth Hospital, Covington, on Thursday evening, April 1, 1943 with sixteen members present. The meeting was called to order at 9:15 P. M. by the President, N. A. Jett.

Because of the late hour the business meeting was dispensed with and the speaker of the evening was introduced. Parke Smith, of Cincinnati, gave a most interesting and informative talk on New Treatment for Carcinoma of the Prostate. Drs. Cornell, Reynolds, Miner, H. Caldwell and Zwick participated in the discussion. The meeting was then adjourned.

Robert L. Biltz, Secretary

Union: The Union County Medico-Dental Society met at the Sturgis Hotel, Sturgis, on Tuesday, April 6, 1943 with a dinner meeting at 7 P. M.

Minutes of the previous meeting were read and approved. The Health Officer called the attention to some Civilian Defense and some group hospitalization literature. He called attention to the new eye disease that the State Department of Health had written about and a case that occurred in Webster County was described by Dr. Frank M. Melton. Attention was also called to the war sessions of the Kentucky State Medical Association to be held October 4, 5 and 6 in Louisville.

Mr. Van Roberts presented the U. S. P. H. S. sound film on the "Modern Treatment of Syphilis." After a very interesting discussion, the meeting adjourned. Members present were: C. B. Graves, J. W. Conway, Bruce Underwood, H. B. Stewart, G. B. Carr, D. M. Sloan, J F. Whitsell, Bob Clark and D. L. Vaughn. Guests present were: Randall Hayden, Charles Wright, R. Van Roberts, Robert Crooks, Frank M. Melton.

Bruce Underwood, Secretary.

Warren: The Warren County Medical Society met at the Helm Hotel, Bowling Green, Wednesday afternoon, March 10th, at 3:00 P. M. with the following members present: Doctors W. Hal Neel, J. B. Helm, F. D. Reardon, J. H. Blackburn, Eldon W. Stone, G. H. Freeman, Lewis Fine and Finis London.

There was an election of officers for the year. W. Hal Neel was elected president, Finis London, Woodburn, Vice-President and J. H. Blackburn Secretary-Treasurer.

A Committee on Hospitalization was appointed. The committee is as follows: F. D. Reardon, E. W. Stone, and J. B. Helm.

John H. Blackburn, Secretary.

FORUM

A. F. M.
April 7, 1943
South America

Dear Dr. McCormack:

I guess you thought I had forgotten my promise to keep you informed as to my progress in the army, but truthfully the army has kept me either so busy or moving so much I haven't had time to even write to wife.

We graduated from Kelly Field, Texas on March 11th, 1943 and have been busy ever since. We had quite a course in practical application of what we studied in Randolph Field. Now we are down here ready to get to work. General Reinartz spoke at our graduation exercises at Kelly Field and said our class was the best large class they had ever had at Randolph and for which we were very proud. He is one grand fellow and has high ideals too.

There is so little I can tell you as we must censor our own letters. However, this surely is one large country and the language, habits and customs are all so odd and strange to us. Everyone seems to bend over backwards not to offend the natives and to undo the impression the Germans left on them.

The weather is hot and sultry, you have to force yourself not to get lazy—you can sleep nearly all the time if you give in to your feelings. I can't tell you much more. I had intended to pay you a personal call before leaving the states, but was sent out on 24 hours notice.

Be sure to send the Journal to me here. It will follow me if I am moved.

Yours sincerely,
Paul E. Harper, M. C.
A. P. O. No. 643 %Postmaster
Miami, Florida

NEWS ITEMS

Dr. Claude Youtsey, 62, of Newport, for twelve years Chairman of the Campbell County Board of Health, died recently.

Dr. Arvid O. Taylor, 59, of Maysville, died of a heart attack, March 9th.

Major Paul S. York, of Glasgow, was graduated from the medical inspector's class of the Medical Field Service School at Carlisle Barrack, Pa. He will supervise all the sanitation in this camp.



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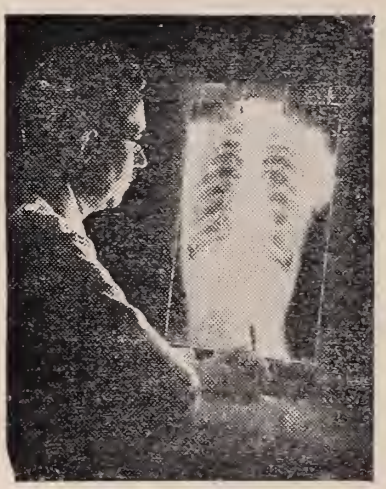
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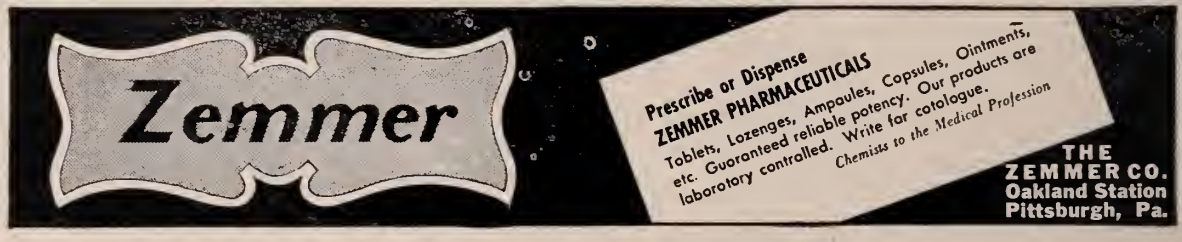
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*Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60
Proc. Soc. Exp. Biol. and Med., 1934, 32. 241
N. Y. State Journ. Med., Vol. 35, 6-1-35, No. 11, 590-592.



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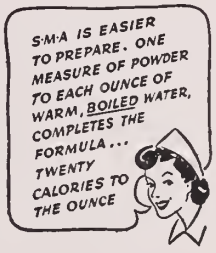
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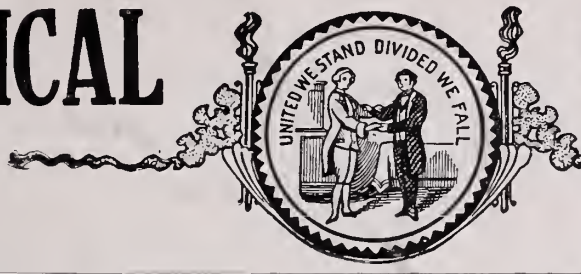


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JUN -7 1943

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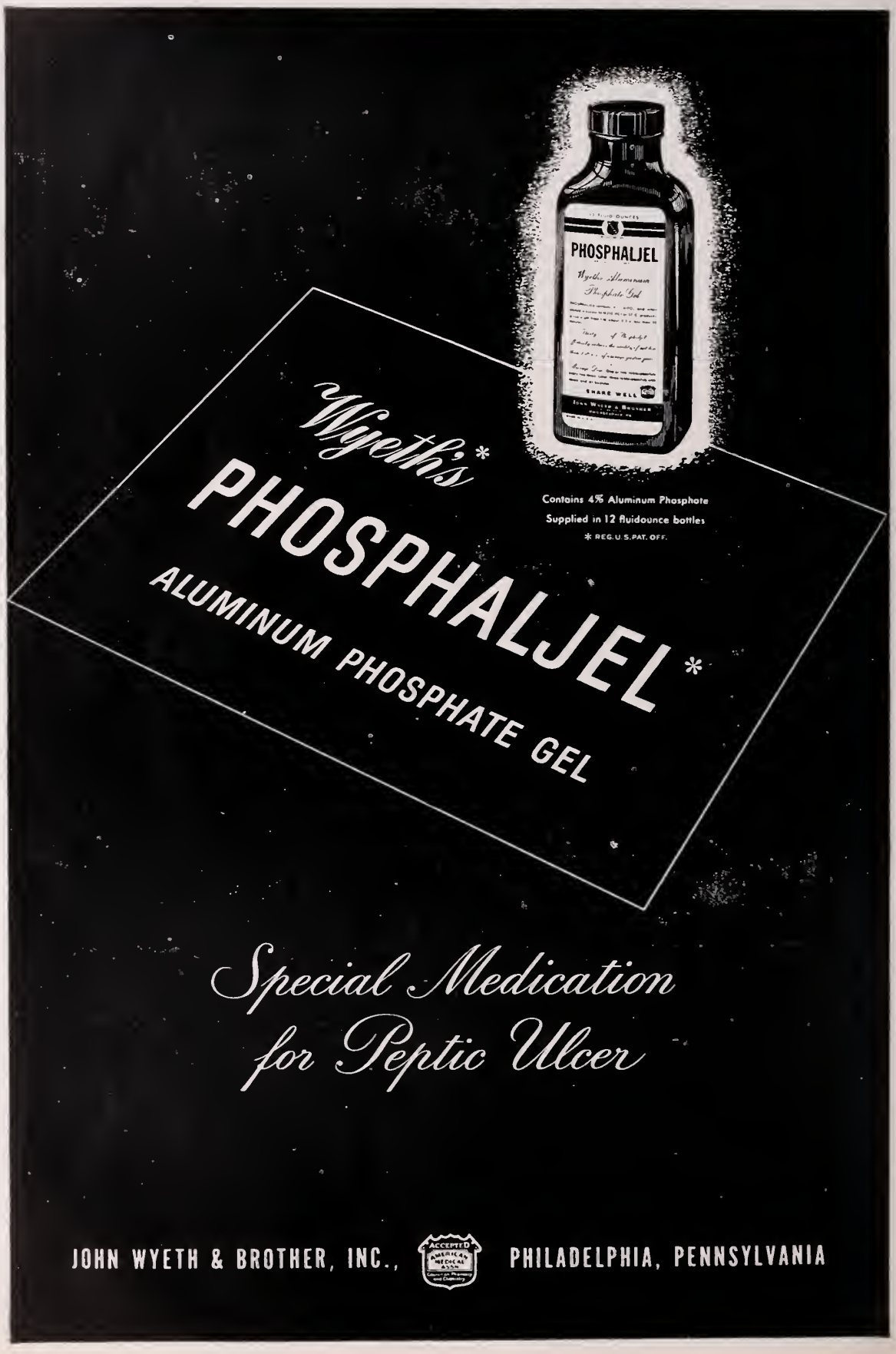


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Ballard	F. H. Russell	Wickliffe	June 8
Barren	C. R. Markwood	Glasgow	June 16
Bath	H. S. Gilmore	Owingsville	June 14
Bell	Edward S. Wilson	Pineville	June 11
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Bourbon	George M. Jewell	Paris	June 17
Boyd	R. G. Culley	Ashland	June 11
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Bracken-Pendleton	W. A. McKenney	Falmouth	June 24
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Carter	Don E. Wilder	Grayson	June 8
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*Welch, H., and Brewer, C. M.,: The Toxicity-Indices of Some Basic Antiseptic Substances, Jl. of Immunology, Jan., 1942.

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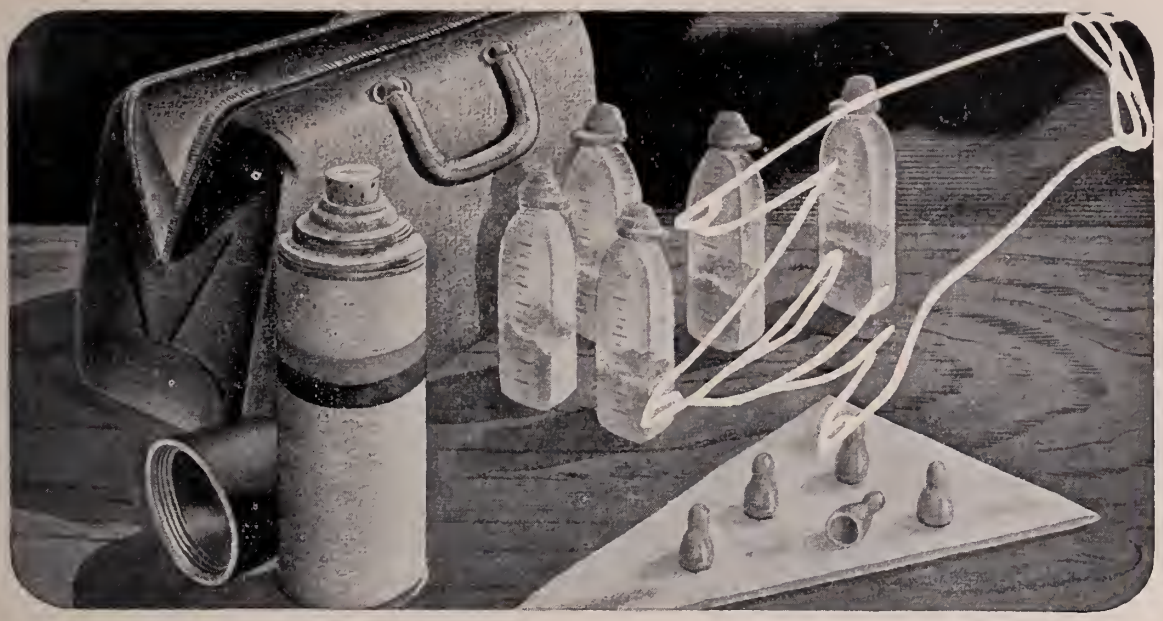
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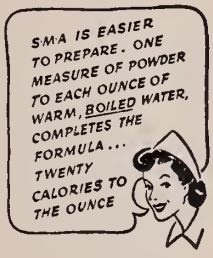
★ ★ ★

Just because my boss turned over a new leaf . . . he wants everybody to pat him on the back for it. But he's not fooling us . . . we know how he got to be such a nice man.

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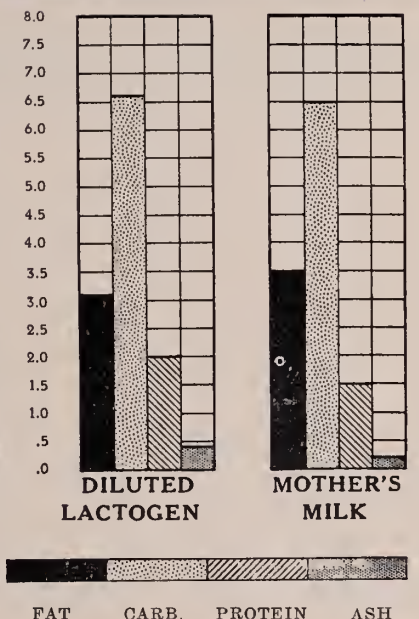
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"My own belief is, as already stated, that the average well baby thrives best on artificial foods in which the relations of the fat, sugar, and protein in the mixture are similar to those in human milk."
John Lovett Morse, A, M., M. D, Clinical Pediatrics, p, 156.



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KENTUCKY MEDICAL JOURNAL

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

VOL. 41, NO. 6 BOWLING GREEN, KY. JUNE, 1943

THE ANNUAL MEETING

The members of the profession are urged to begin now making arrangements to attend the annual meeting of the Kentucky State Medical Association which will be held in Louisville on October 4th, 5th and 6th.

This meeting will be conducted in conformity with plans sponsored by the American Medical Association, the American College of Physicians and the American College of Surgeons, and approved by the Surgeons General of the Army, Navy and Public Health Service. The whole program is expected to be devoted to postgraduate instruction, and so will afford an unparalelled opportunity for members of the profession to familiarize themselves with the latest developments in the different branches of medicine, which will be brought to them by specialists in their respective fields. Officers in the medical corps of the various branches of the armed service, Army, Navy, Marine and Air Corps, will take prominent parts in the discussions.

No physician in Kentucky, whether general practitioner or specialist, can afford to miss this meeting. Watch for further announcements and make your hotel reservation early.

OUR NEW COUNCILOR

Dr. E. L. Gates, of Greenville, has been elected Councilor for the Second District to fill the unexpired term of Dr. D. M. Griffith, Owensboro, who has resigned.

Dr. Gates has been Medical Referee of Muhlenberg County for many years and served a full term on the State Board of Health, has been a frequent contributor to the programs of State, District and County Medical Societies, and is one of the foremost practicing physicians of the State.

Dr. Griffith was the oldest member of the Council in point of service, a former President of the Association, Delegate to the American Medical Association, Fellow of the American College of Surgeons, and Medical Referee for many years for Daviess County. Dr. Griffith is the orator of the profession in Kentucky and has been one of its wisest and most constructive statesmen. It was with profound regret that the Council accepted his resignation and we are sure we will be joined by every physician in Kentucky in wishing him many years of usefulness in serving his people through his chosen branch of medical practice. Dr. Griffith has the affection and confidence of as many physicians as any other member of the profession in Kentucky.

FIFTY YEARS OF SERVICE

Dr. William J. Thomason, of Newport and Fort Thomas, was a guest at dinner in his own home, where he has practiced medicine for fifty consecutive years, on April 15th.

Those present told of Dr. Thomason's graduation from the Ohio Medical College in 1893, of his years of service as a general practitioner, and of his more recent years of limitation of his practice to diseases of the eye, ear, nose and throat. During all of this time he has been a valued member and leader in his local and State medical organizations.

He introduced the physical examination and vaccination of students in schools and sponsored the first milk inspection ordnance in Newport.

It will delight Dr. Thomason's friends all over the state to know about this tribute to a good man and a great physician.

JAMES OLIVER CARSON

1855 - 1943

In the passing of Dr. James Oliver Carson, at his home in Bowling Green on March 17, the medical profession has been bereft of one of its outstanding and most esteemed members.

A sense of personal emotion has prompted the writer to pay tribute to a friendship which has endured for many years. It is befitting the memory of this respected and beloved colleague that his obituary should come through the columns of the Journal, a copy of which was ever present on his

desk and which offered the means of contact with his confreres and kept him abreast of the progress in the science and practice of medicine.

Dr. Carson was a native of Kentucky. He was born December 3th, 1855, on the pioneer land grant of his great grandfather in Warren County, son of Oliver Cromwell Carson, farmer and surveyor, and his wife, Elizabeth Collins Carson. He received his early education at the old Quarry School House, Warren County and in 1876 obtained his A. B. degree at Warren College, Bowling Green, now Ogden College. He then enrolled in the medical department of the University of Louisville, from which he obtained his degree of Doctor of Medicine, in 1878. From the time of his graduation in medicine until 1886 he was engaged in general practice in Bowling Green. His early activities speak for themselves, in that during his first year in practice the State Board of Health of Kentucky honored him with the appointment as quarantine officer. In this capacity he made a survey of the dysentery epidemic prevalent in the mountains of Southeastern Kentucky at the time.

While engaged in general practice in Bowling Green, Dr. Carson exhibited a special interest in diseases of the eye and ear, which led him to spend considerable time and energy in pursuing a study of Trachoma, as it occurred in the Green River section of the State. This interest culminated in his adoption of this department of medicine as a specialty, for which he prepared himself in a year of training in the eye and ear department of the New York Post Graduate School of Medicine.

In 1888 Bowling Green could boast of its first specialist in eye and ear diseases, when Dr. Carson returned to the seat of his early general practice, to devote himself exclusively to the practice of Ophthalmology and Otology. He immediately secured the confidence of his constituency and, in a very short time, he controlled a large and influential clientele. Dr. Carson was a member of the medical staff of the City Hospital of Bowling Green. He served on the board of medical examiners during the World War I; was U.S. Pension examiner since 1887 and was an active member of the Warren County and the Kentucky State Medical Societies and of the American Medical Association; also charter member of the State Eye and Ear Society and Fellow of the American College of Surgeons.

The deceased had, throughout his presence in Bowling Green, evidenced a keen interest in the civic affairs of the community. He was a charter member and ex-president of the local Rotary Club, member and past squire of the XV Club of Bowling Green and a participant in all civic activities which related to the welfare of the city of his adoption. He was an active member of the Presbyterian church and a member of the Masonic order.

Dr. Carson died as he had lived, serving humanity, having passed away suddenly and peacefully while preparing to close his office after a busy hour of service to others. He is survived by his wife, Margaret Poindexter Carson, to whom he was married in 1893. Three daughters also survive him: Mrs. W. P. Drake of Bowling Green, Mrs. W. O. Sibert of Glen Ridge, N. J. and Miss Loraine Carson of West Palm Beach, Flordia, and a son, Capt. Wm. Oliver Carson, now serving in the medical corps at Fort Lewis, Washington; also three grandchildren.

The death of Dr. Carson has created a void in the community in which he had lived and in the roster of the State Medical Association. The doctor was endowed with all of the attributes which go to make up a successful practitioner of medicine. His quiet gentle bed side manner, his faithful attention to those who sought his service and his keen sense of obligation to duty endeared him to a host of erstwhile patients, who will mourn his loss. Their memory of him will serve as a living monument of his unselfish and indomitable career.

Among his colleagues in medicine Dr. Carson occupied a position of respect and affection. He was known, among his contemporaries, for his honorable and ethical attitude in consultation and his gentlemanly demeanor under all circumstances. His wise council in medical discussion and administrative affairs will be missed, as will his original contributions to Ophthalmic and Otologic literature.

Those who knew Dr. Carson best have the conviction that it was only his extreme modesty which deprived him of a merited national prominence. The medical profession mourns, with the grief stricken family, the loss of an associate and loyal friend whose influence will long endure in the community he served.

Adolph O. Pfingst

ORIGINAL ARTICLES

RELATIONSHIP OF PUBLIC AND PHYSICIANS IN WAR

Irvin Abell, M. D.
Louisville

The relation of the medical profession to the civilian population and that of the civilian population to the medical profession during the war emergency must be one of harmonious cooperation in order that the armed forces be provided with adequate medical service and the civilian population be supplied with the needed attention. Since the aggressive war of the totalitarian nations threatens not only our way of life, our institutions and our homeland, but our type of civilization itself, it is unthinkable that our armed forces, who offer their all upon the altar of patriotism, be not provided with the best available medical service and in such quantity as their needs demand. The people of no country have enjoyed the quality and quantity of medical service as has been available to the citizens of the United States during recent years. The supply of doctors in urban centers has been over abundant and in rural communities, with few exceptions, it has been sufficient to maintain normal health standards, while in sparsely populated sections medical as well as other services have been minimal or nonexistent. The growth and development of the hospital movement have placed its facilities at the disposal and within reaching distance of the vast majority of our people. The national health greatly improved after World War I as a result of the application of the science and art of preventive medicine, the knowledge of which was greatly broadened by the mass management of men under arms and in supporting trades and industries incidental to war. One can truly say that the excellence of the health of our people today is greater than at any previous time and better than that of any comparable population elsewhere under any form of government. Furthermore, there is no reasonable, discernible threat to the continued health of the civilian population, if we make intelligent use of the resources available to us. One of the perplexing problems in a democratic society is to secure the fullest use of the nation's talents: in war this is even more urgent than in peace.

Address delivered before the Kentucky State Medical Association, Louisville, September 28 - October 1, 1942.

Our resources in medical personnel as of January, 1942 are as follows:

Total number of physicians in Continental United States 176,200.

Ages:	under 36	42,700
	36-44	38,200
	45-54	31,900
	55 and over	63,400
	Total under 45	80,900
	Total under 55	112,900
Scope of practice:		
	General practice	86,000
	Full or Partial Specialists	90,200

Full Specialists 38,200: Partial Specialists 51,400

Auspices of Practice:		
	Private Practice	141,500
	Full-Time Salaried Physicians	33,500
	Hospital Positions 16,500	
	Including Administrators (3100):	
	Residents, Asst. Residents and Fellows (6200)	
	Interns (7200)	
	Government Positions 9800	
	Federal (6100): State (1400)	
	Local (2300)	
	Academic Positions (Teaching and Research)	3,700
	Industrial Positions	2,300
	Other Executive Positions	1,200

For years a major problem in providing adequate medical care for the civilian population has been the inequality of distribution of physicians and the difficulties in solving this have been greatly increased by the war effort. The ratio of physicians to the population is much higher in the wealthier states than in the poorer states, and in the cities than in the rural areas. Prior to the dislocation of war effort the national average was approximately 1.2 physicians in active practice for every 1000 persons, medical officers in active military service absorbing slightly more than one per cent of the country's active physicians. The distribution varied from one physician for 490 persons in New York to one for 1360 in Alabama and one for 1490 in Mississippi. Large shifts in population have taken place as a direct result of the war effort still further confusing the situation. Munitions plants and other war industries have drawn large concentrations of workers to rural villages. As an example, Vallejo, California, has grown from a village to a city of 80,000 and as yet there is but one hospital of 60 beds and but few doctors to serve this community.

Bremerton, Washington, also a navy

base, has 60,000 population with 16 physicians to take care of it; Osage, Texas, a shipbuilding town, 30,000 population with but 7 physicians to take care of it; the Glenn Martin aircraft factory in Baltimore County, Maryland, has 40,000 people with but 11 doctors to take care of them; Chickasaw, Alabama, also a shipbuilding operation, has 20,000 people with but two physicians to take care of them. Doctors have hesitated to follow their potential patients to the war-industrial boom towns, which offer neither permanent opportunity nor adequate financial reward. And yet in the final analysis these vital defense workers must be served.

These industrial concentrations have naturally given rise to considerable disturbance on the part of the physicians of the country and on the part of the authorities at Washington. Naturally, the authorities feel that since these men are engaged in the production of war materials, the responsibility of the Government is a direct obligation to them. As a result of the studies which have been made, only last week a release was given out by the Office of War Information from the Administrator of the War Man-Power Commission, Mr. McNutt. This has been approved by the Board of Trustees of the American Medical Association, the American Dental Association, by the war committees of the two organizations, and as well by the Executive Committee of the Territorial Health Officers' organization. I think for the benefit of the doctors in the audience we might as well let you hear what these principles are, since they have to do with the supply of emergency medical service, not alone in the industrial concentrations which I have mentioned, but also in the sparsley settled portions of the country where medical care is either defective or not available.

These principles are as follows:

1. That it is a responsibility of the Procurement and Assignment Service to ascertain the needs of the civilian population, non-military, for medical service.

2. That it is the responsibility of the Procurement and Assignment Service to aid in providing the medical personnel to meet these needs.

3. That as presently constituted, the Procurement and Assignment Service is not in a position to deal with the financial and administrative problems involved in the provision of medical care.

4. That so far as possible these problems should be met at the state level in view of the many different types of problems and needs and the relation of these and their solution to local situations.

5. That a survey of these needs should be made by the existing committee of the Procurement and Assignment Service with the aid of such technical assistance as may be necessary. It is especially desirable that in determining these needs the State Procurement and Assignment Committee seek the cooperation of the State Health Department, of the State Medical Society and of the State Dental Society, of industry, of organized labor, and of other agencies, such as the State Defense Council, which should be able to make significant contributions to the solution of this problem.

6. That whenever possible the civilian needs as determined by these committees should be met through local arrangements, resources and agencies. If case assistance is needed for the organization, administration or financing of necessary medical or dental services in these areas, the responsibility should devolve upon an agency which should include representatives of the State Health Department, the State Medical Society, and the State Dental Society, with the cooperation and support, financial and technical, of the appropriate federal agencies; the administration of funds being delegated to the appropriate state agency.

7. That since these problems have been occasioned by the war, and in many instances transcend state lines, the Federal Government has a definite responsibility to cooperate with the states in meeting these needs by the provision, when necessary, of financial and technical assistance.

8. That the needs for medical care in certain areas are so acute and the pressure from various sources so great that it is imperative to have prompt action for implementation of this program. It appears to the Directing Board that the responsibility for the initiation of such action rests with the War Man-Power Commission.

I read these principles in order that you might have some idea of the benefits which may be obtained by the cooperation between our medical associations, local, state and national, and dental associations, with federal services in meeting the need which is at hand.

In order to anticipate the maximum needs of war, the medical strength of the armed forces is maintained at a higher

level than is usual in a civilian population, 6500 to 7000 physicians being required for each million of military personnel. At the present time approximately 37,000 physicians have taken their oath of office, or are now in the process of being commissioned in the Army and Navy. This represents 21 per cent of the total number of physicians in the Continental United States and 26.1 per cent of the physicians in active practice. With further expansion of the armed forces additional medical officers will be required. If the Army and Navy reach a strength of 9,000,000 and announced ratios are maintained, about 58,000 physicians will be needed, or about one-third of all the physicians in the country. To what extent will this place a strain on medical services to civilians? While removal of 33 per cent of all physicians would, even if evenly distributed over the medical population, constitute a serious depletion, the effect on medical services may be expected to be greater than this over-all percentage would indicate. What proportion of the required 58,000 physicians will come from the various age groups is not definitely known, but for practical purposes very nearly all of them will be under 45. There are 80,900 physicians under 45 years of age, of whom 42,700 are under 36 and 38,200 are between 36 and 45. If every male citizen physician under 36 were to join the armed forces, there would still be required about 18,000 additional physicians, or about half of the male citizen physicians between 36 and 45. This makes no allowance for the very considerable number who are physically unable to qualify for a commission, nor for the fact that of those under 36 about 6 per cent are women or non-citizens, and consequently not eligible for commission. That the removal of such a high proportion of the younger age groups would result in serious problems in civilian medical practice is evident. A large amount of the burden of research, medical teaching, and care of hospital and clinic patients by interns, residents and practitioners getting a start, falls normally on this age group. It is apparent that the services rendered by it and heretofore considered necessary will have to be carried on by older physicians, or not carried on at all. These figures, however, do not give a true overall picture of the situation, because of the inequality of distribution of physicians throughout the country. Many of the younger physicians in rural communities were members of the Medical Reserve Corps and the National Guard and have been called to duty with their respective organizations, leaving aged and infirm physicians to carry on in rendering the needed medical service. The depletion in many such communities is such that they would be seriously jeopardized by the advent of a major epidemic. If the regions where physicians are already scarce are to be protected against serious depletion, the better populated States, medically speaking, must give up more than the national average. That this principle has been recognized is indicated by the statement that eight populous States, New York, Illinois, California, Pennsylvania, Massachusetts, New Jersey, Michigan and Ohio, will be expected to supply 16,000 by the end of this year and that 16 States have supplied virtually all they should spare. (Jr. A. M. A. 119 p. 715, June 27, 1942). The Army and Navy will require a large number of certain categories of specialists, notably in neuro-surgery, plastic and maxilla-facial surgery, orthopedic surgery, thoracic surgery, neurology, anesthesia, pathology, clinical pathology and bacteriology. Such men are highly and slowly trained and cannot be quickly replaced. Further strain on civilian medical services will result from withdrawal of an undue proportion of these men. Minimal civilian needs will be maintained only by active efforts to distribute equitably the burden of this loss and at the same time providing for training more specialists. Graduate training in the specialties of medicine is being greatly curtailed, because of the urgent needs of the armed forces for young physicians. All physicians at the end of the intern year are now available for active military duty. Those whose physical condition renders them ineligible for commission in the armed forces should be registered to assure their allocation to fields in which their professional training may be utilized to the greatest advantage. In fact, the only grounds for deferment of military service for physicians to pursue graduate training is when such training is incidental to "essential" service as a hospital resident. In certain hospitals a resident staff is necessary for the adequate care of patients. Recognizing this, the Procurement and Assignment Service has authorized the listing of certain residents as essential. The period during which any individual may be so listed is not to exceed two years beyond the in-

ternship: the number of residents listed as "essential" is to be kept at a minimum: this minimum is not to exceed 50 per cent of the number of residents which the hospital has ordinarily had: and, as far as possible, essential residencies are to be filled with individuals who do not meet the requirements of the armed forces for commissions. After 1943 there may be serious difficulties in securing physicians to fill even "essential" hospital residencies. At that time all physically qualified male interns will be under the jurisdiction of the Army or the Navy and so cannot be appointed to residencies, unless given deferment of call to active duty. Failing this, unless essential residencies can be satisfactorily filled by women, or by men not physically qualified for military service, there will be in certain hospitals a serious reduction in the quality not only of the care of patients but also of the training of interns and medical students. Of the practicing physicians in the country about 3800 a year become unavailable for military or other duty, because of death, illness and old age. Replacements have been made readily heretofore from the annual output of medical graduates, slightly more than 5,000 annually. In view of the urgent need of doctors, both for the military and civilian populations, the medical schools conceived it to be their duty to train capacity classes as rapidly as is consistent with the maintenance of high standards. Consequently, as a war measure, the schools have increased the size of their classes by approximately 10 per cent. They have adopted an accelerated program, eliminating vacations, which calls for the graduation of a class every nine months. This will mean the graduation of 21,209 doctors in the next 3 years, or 5082 more than under the former program of the same four courses, but each in a separate calendar year. The W. C. Kellogg Foundation and the United States Government have made available loan or scholarship funds, which will enable those to complete the medical course who heretofore have relied upon earnings during the vacation period to accomplish the same purpose. The Office of Civilian Defense through its Medical Director has made extensive, carefully thought out plans for the protection and care of the health and welfare of civilians injured by enemy action. First aid measures, casualty stations, means of transportation, hospitalization, blood and plasma banks, and such other aids as are needed in the presence of such disasters have been provided in the larger cities.

All medical agencies concerned in the war effort are giving serious study to the problems presented. The American Medical and other national medical associations, the Health and Medical Committee of the Defense Health and Welfare Service, the Procurement and Assignment Service of the Manpower Commission, the medical director of the Office of Civilian Defense, all are engaged in a coordinated planning to prevent serious dislocation of medical service among civilians while at the same time supplying the armed forces with the service they require.

It may interest this audience to know something of the situation in Kentucky. The ratio of physicians in the State at large before induction was 1 physician to 1151 of population: after induction, as of September 1st, it was 1 to 1460. The number of physicians over 45 years of age who remain at home is 1509: the number of physicians under 45 years of age classified as essential at home is 214. The number of physicians under 45 years of age classified as still available for military service is 262. The number of physicians commissioned in the Army, Navy and Public Health Service is 533, or 21.3 per cent of the 2518 physicians of the State. Breaking these figures down further, we find that the average age of physicians in 12 principal counties having cities of 10,000 or more population is 56.4 years, the lowest average age in any one of these counties being 53, the highest 62.. The average age of the county health officers and assistant county health officers and physicians in the Central Office of the Kentucky Department of Health in 46 years. The average age of the 108 physicians on the teaching staff of the University of Louisville Medical School is 44 years.

The number of counties with a ratio of 1 physician to 1000 or less population before mass induction, 17;- after mass induction, 7. These are: Fayette County, before induction 1 - 537, after induction, 1 - 743: Jefferson County, before, 1 - 593, after 1 - 847: Scott County, before, 1 - 753, after, 1-894: Christian County, before, 1 - 808, after, 1 - 887: Henry County, before, 1 - 812, after, 1 - 870: Madison County, before, 1 - 754, after, 1 - 955: Woodford County, before, 1 - 996, after, 1 - 996. From these ratios it is evident that these counties will not be seriously affected in affording service to civilians.

Number of counties with ratio of 1 physician to 1000 to 2000 population before induction, 62: after induction, 59.

Number of counties with ratio of 1 physician to 2000 to 3000 population before induction, 22: after induction, 22.

Number of counties with ratio of 1 physician to 3000 to 4000 population before induction, 12, after induction, 10.

Number of counties with ratio of 1 physician to 4000 to 5000 of population before induction, 2: after induction, 2.

Number of counties with ratio of 1 physician to 5000 to 6000 of population before induction, 2: after induction, 3.

Number of counties having ratio of 1 physician to 6000 to 7000 of population before induction, 1: after induction, 1.

Number of counties having ratio of 1 physician to 7000 to 8000 of population before induction, 1: after induction, 1.

Number of counties having no physician, 1.

Casey County, with 1 physician to 5091 of population before and after induction, has 4 physicians, 3 of whom are in the upper age levels, and 1 under 45, classified as essential.

Leslie County, with 1 physician, has a population of 7754.

Knott County, with 3 physicians, all in the upper age levels, has a ratio of 1 physician to 6868 of population.

Breathitt County had before induction 5 physicians, a ratio of 1 physician to 4859 of population: 3 of these were members of the Reserve Corps, or National Guard, and have entered service, leaving 2 physicians in the county, a ratio of 1 physician to 12,148 of population.

These figures for the State afford a graphic illustration of the inequality of distribution, but do not negate the assertion that with proper utilization of our available medical personnel civilian service could be adequately protected.

Our hospitals are experiencing similar difficulties. With every passing day they are called upon to sacrifice more of their trained personnel for the war effort. Executives, staff physicians, interns, nurses quietly leave their accustomed posts to enter their country's armed forces, clinical workers, aids, orderlies, help of all classifications disappear from the wards and offices to work for defense plants, or to go elsewhere. Because of this shortage workers who remain behind have undertaken greatly increased responsibilities in order to help maintain the efficiency of their hospitals. But they alone cannot supply the need. They are training armies of volunteers, women for the most part, who give their time and services freely to hospitals as their contribution to maintenance of civilian morale. However, much of the hope that hospitals will be able to continue their services efficiently through the war lies in the attitude of all citizens, in their acceptance of changed conditions with patience and understanding, in their realization that the frills and luxuries of peacetime nursing care are no longer available.

It is well for all of us, both physicians and civilians, to remember that in time of war adjustments must be made to meet the exigencies as they arise: medical service will prove no exception to the rule. Civilians must realize that as the war effort is prolonged and the situation becomes more acute modifications in medical care will come about: they must adjust themselves to these as they have to the more tangible things, such as sugar, gasoline and tires. It would be most desirable to have a full time health department in every county in the country. The orderly administration of public health measures and the prevention of epidemics are of signal importance in the maintenance of community health. Public health is but the composite expression of a multitude of individual healths. Consequently, the better the public health the less the need for individualized medical service. Preventable illness and unreasonable demands on the time of physicians must be reduced to a minimum. There will be need for exercising every possible means for minimizing unnecessary medical services and for conserving the medical manpower of the country in order that the real needs may be met.

Men and women who have retired from practice should be encouraged to return to active work and assist during the period of the emergency. Those contemplating retirement should forego such a step, unless impelled by physical disability or other valid reason. Older members of hospital staffs will have to do the work formerly performed by their juniors and assistants. Deducting the physicians needed for the armed forces, there will remain an ample ratio for all necessary medical purposes, if distributed according to population rather than in response solely to the physicians personal, economic and social advantages and prerogatives. England and Wales have had approximated adequacy

according to their standards with a ratio of 1 physician to 1490 persons, and Sweden satisfies her people with 1 physician for each 2890 of her population. It behooves all of us to work a little harder, sacrifice a little more and lend our efforts to the fullest capacity to the end that our country will be better served. We must not underestimate the serious drain this puts on available medical services in civilian communities. It will mean long hours and hard work— sacrifices which will multiply the deep debt that every community owes its physicians: men and women, who by education, training, experience and moral convictions are committed to the belief that their greatest function is the service they can render humanity. They join with all other groups in a common interest to forward policies and measures which will insure our national safety and protection in a world where barbarism has been substituted for sanity and where ruthless force and destruction have taken the place of logic and civilized processes.

DIARRHEAL DISEASES IN CHILDREN WITH EMPHASIS ON TREATMENT

Alice Drew Chenoweth, M. D.
Louisville

Diarrhea is a symptom and may reflect the body's response to such widely varying causes as focal infection, allergy, deficiency disease, malignancy, etc. I have chosen to limit my discussion to acute bacillary dysentery and related infectious diarrheas of infancy and childhood. A very important group of pediatric cases, usually infants, with diarrhea secondary to a focus of infection elsewhere than in the gastrio-intestinal tract, will not be included. I have also purposely omitted amoebic dysentery, which is rare in childhood in our country, and I shall not discuss the food-poisoning group of diarrheas.

Although bacillary dysentery is a reportable disease in Kentucky, we believe the reporting to be very inaccurate. One reason for this is that medical knowledge has not advanced far enough to enable us to name the etiologic agent in every case of diarrhea, even in the best hospitals where every known laboratory aid is available. As laboratory methods are improved however, a gradual increase is being noted in the relative percentage of infectious as compared with so-called non-infectious diarrhea. The same measures which have lessened the incidence of truly infectious diarrheas have also caused a decrease in the number of simple or non-infectious diarrheas. Which leads one to the supposition that more of our cases of simple gastroenteritis are in reality infections caused by organisms either unknown to us or unrecognized by us. Further, many cases of dysentery we are convinced are not reported because they are so mild that no physician is consulted. Even when consulted physicians frequently are not able to make a positive laboratory diagnosis either because of lack of adequate laboratory facilities or inability of their patients to pay for this service.

Therefore we believe we can obtain our most accurate data on diarrheas by studying mortality rather than morbidity statistics. Taking the median for the past five years, Kentucky's mortality rate is 41.7 per 100,000 population. This is exclusive of amoebic dysentery, which represents only 4% of the total dysentery deaths, and includes the deaths classified under diarrhea-enteritis, the reported cause of the great majority of diarrheal deaths for the first two years of life.

TABLE I
MORTALITY IN SELECTED AGE GROUPS FROM DYSENTERY AND DIARRHEA-ENTERITIS
STATE OF KENTUCKY
FIVE YEAR AVERAGE, 1937 - 1941

Age Group	Death Rate (1)
Under 1	983.5
1 - 4	110.4
5 - 9	4.9
10 - 19	1.5
20 - 29	2.6
30 - 39	3.1
40 - 49	5.4
50 - 59	10.0
60 - 69	27.9
70 and over	121.8

(1) The five-year average rate is based on the 1939 interpolated population, which is the mid-year of the series.

If we break these cases down into age groups, we find that by far the greatest number of deaths occurs in the age group under one year of age, the second highest is in the so-called preschool group, i.e., between the ages of one to five. It is an interesting fact that the high mortality rates are found in both extremes of life, for as will be seen in the accompanying table the mortality rate again becomes increasingly higher after the age of fifty.

Read before the Kentucky State Medical Association, Louisville, September 28 - October 1, 1942.

TABLE II

MORTALITY IN THE PRESCHOOL AGE GROUP FROM SELECTED CAUSES

STATE OF KENTUCKY

AVERAGE FOR FIVE YEARS, 1937 - 1941

Disease [1]	Average No. of Deaths	Average [2] Rate
Diarrhea-enteritis and Dysentery	254	110.2
Pneumonia	170	73.8
Accidents	118	51.2
Whooping Cough	64	27.8
Diphtheria	58	25.2
Influenza	48	20.8
Tuberculosis	44	19.1
Meningitis[3]	36	15.6
Measles	26	11.3
Heart Disease	18	7.8

[1]Leading causes of death arranged according to importance

[2]Age specific per 1000 population

[3]Total meningitis exclusive of tuberculous, which is included under deaths from tuberculosis.

In Table II will be seen the eight most important causes of death in the age group under five years. First in the list is diarrheal disease, which results in a higher mortality than whooping cough, diphtheria, influenza, tuberculosis and meningitis combined. Pneumonia is the second chief cause of death in this age group.

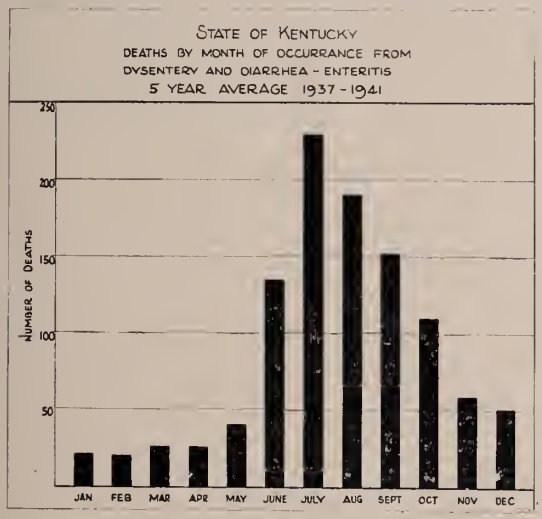


Figure 1

As will be seen from Figure 1, the peak months for the occurrence of the diarrheas in Kentucky, judging from the mortality statistics, are July and August. This coincides rather closely with the incidence of cases of typhoid fever.

That measures directed against typhoid have born fruit is shown by the rapid decline in the number of fatal cases of typhoid over a period of years as is seen in Figure 2. That there has also been a gradual reduction in the number of deaths from diarrheal diseases is demonstrated also in this chart, but the downward trend of the latter is less marked.

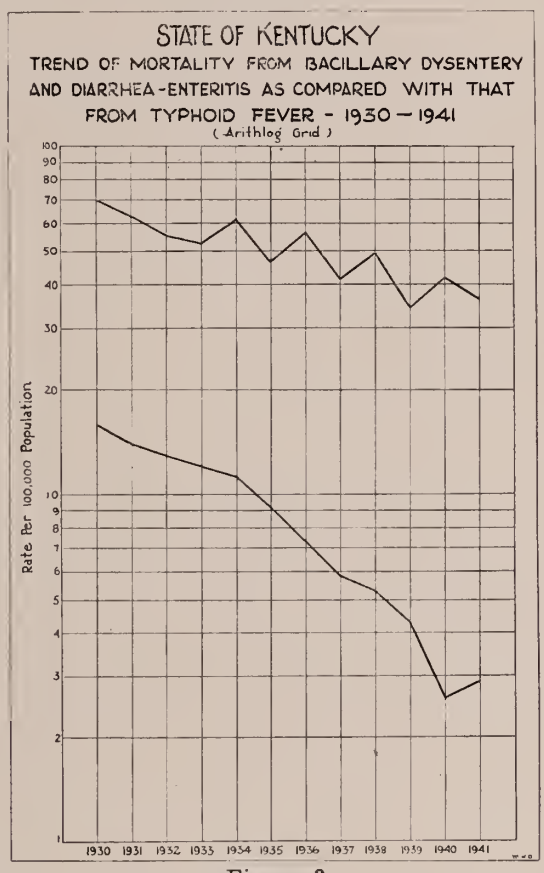


Figure 2

This means that the measures which have been employed in the fight against intestinal infections have been more successful in combating typhoid fever than in combating the infectious diarrheas. In seeking the reason for this difference, we recognize at once that immunization against typhoid has no practical counterpart in the prevention of bacillary dysentery or other infectious diarrheas. But further than this epidemiologists tell us that there is a difference in the usual methods of spread of the two diseases, typhoid being chiefly a water or milkborne disease. Dysentery on the other hand is most often transmitted by flies or direct contact with cases or carriers, and is less often spread by means of milk and water. Lyon[1], who has had a wide experience with dysentery in the children of the coal mine

region of West Virginia has said: "Where community sanitation is inadequate and flies have access to contaminated excreta, the excessive incidence of dysentery will vary in relation to the total fly population. There would be relatively little dysentery among infants or young children if all human excreta, including the very important diarrheal diaper, were adequately protected from fly contact."

It follows therefore that the public health measures directed against milk and water contamination have been eminently successful in typhoid and also somewhat effective in dysentery, but in dysentery further public health measures need to be taken, i.e., these directed mainly against excreta disposal, flies and carriers.

In Kentucky most of the reported cases of dysentery are of the Flexner type. Judging from data obtained by Caudill[2], the ordinary prevalence of dysentery cases in Kentucky caused by the Flexner Bacillus is about 60%, by Sonne is about 30%, by Hiss Y and others about 10%.

Clinically cases of bacillary dysentery may show great variation in the degree of severity, usually however, a characteristic clinical picture is presented in children, the cardinal symptoms being fever and diarrhea. The temperature may be very high, rarely even as high as 106°-107°. Frequently there is vomiting, but abdominal cramps and straining are not as frequent in children as in adults. Bowel movements are small and numerous and contain mucus, pus, and blood. Where stool cultures are not possible a procedure of great importance in making a presumptive diagnosis of dysentery is the finding of numerous leucocytes in a smear of the stool.Wheeler[3] found that when mucus, red blood cells and many white cells were seen in smears of stools from suspected cases of dysentery in Adair County, Kentucky, the organism was recovered in 86% of the stools, whereas where no mucus, pus or blood were seen only 12% of the stools were positive for dysentery bacilli. There are few other conditions in which the stool shows the same abundance of leucocytes.

Fever may precede the onset of diarrhea and make early diagnosis difficult unless there is dysentery in the family or community. Occasionally such cases may be so fulminating that death ensues before the onset of diarrhea. Height of the temperature is not always an accurate index of severity; a grave prognosis cannot be assumed from high fever alone. This is particularly true of infants and younger children who because of the instability of their temperature mechanism may respond to a serious or overwhelming infection with a subnormal temperature and to a relatively insignificant infection with a very high fever. A temperature below normal especially in a premature infant may be a much more dangerous sign than a high temperature. I have felt that excessively high temperatures in an infant indicated a grave situation if at the same time cold arms and legs were evidences of an impaired circulation.

Occasionally patients with dysentery, especially infants, exhibit a rapid, overwhelming infection. Such patients appear very toxic, their temperatures rise frequently to abnormal heights. Within a few hours they become so stuporous that if they respond at all to a needle prick or other external stimulus, it is with only a feeble, unsustained cry. Such infants often have a gray color and sunken eyes and show a peculiar leathery tissue turgor known as scleredema. Coma ensues rapidly and convulsions may occur. Death may follow within 36 hours. These cases are pediatric emergencies and require immediate hospitalization for adequate treatment.

At the other extreme many children present an illness so mild and of such short duration that the disease is unnoticed. From the point of view of spread in the community these mild, oft-missed cases are as dangerous as the serious ones which are recognized. The age of the patient, the virulence and dose of the infecting organism apparently are factors which determine the severity of the case. Rapidly fatal cases of dysentery are usually caused by Shiga or Flexner organisms, but any of the known strains may at times cause fatalities.

Symptoms involving the central nervous system occur in a fair percentage of cases. Convulsions not uncommonly usher in the disease especially in infants, and stiff neck, rigid back, and headache, the symptom complex of meningismus, may be present early, and suggest the diagnosis of preparalytic poliomyelitis.

In treating the patient with dysentery the first essential is rest in bed to quiet abnormally active peristalsis. When children become very active in bed or are allowed to get up too soon, relapses are likely to occur. Warmth applied to the abdomen also relaxes intestinal spasm and may be

very comforting to the patient unless the external temperature is excessively high. For children with subnormal temperatures or cold extremities heat is of course indicated.

There was a period when diarrheas were treated with laxatives. If the stools continued, more cathartics were given, dehydration and acidosis were thus increased and the patient's death made more imminent. The pendulum has swung away from this treatment. Cathartics are contraindicated in dysentery since they irritate an already inflamed bowel, further increase hyperactive peristalsis, multiply the number of painful contractions of the bowel, and in the end result in increased dehydration and chemical imbalance.

There is some doubt about the use of enemata, in any case only a simple enema of some substance which soothes or coats over the inflamed mucosa should be given. Temporary relief from tenesmus has been thought to occur following the administration of such an enema. An enema may be indicated if there is marked distention.

Bismuth in the form of the subcarbonate has long been used in diarrheas, and inert earths, such as kaolin and kaomagma and more recently kaopectate and others, have been used extensively. The therapeutic value of these adsorbants is not conclusive. They are probably not harmful and may give some relief of symptoms.

A sedative should be ordered if the discomfort is great enough to result in restlessness and loss of sleep. Those most commonly prescribed by pediatricians are paregoric and phenobarbital, the former being more useful when painful contractions of the bowel are present.

It is important to prevent excoriation of the buttocks in dysentery. Prompt and very gentle cleansing after defecation will help. Also the local application of one of a number of substances such as an oil, an ointment, milk of magnesia and the like, will keep the diarrheal stool which is acid and quite irritating from making contact with the skin. Exposing inflamed buttocks to the warmth of an ordinary electric light will promote healing. A cradle equipped with electric light bulbs is very useful for this purpose. Locally an ointment containing 5% cocaine and 4% tannic acid is recommended for painful buttocks.

With the advent of fluid administration, the treatment of diarrhea became immediately more successful, but at the same time more difficult and complicated. Fluids by mouth should be given freely if tolerated. The most popular of these besides water are: mixtures of such sugars as glucose or Karo with a buffer solution of electrolytes, for example, physiological saline, Ringer's or Hartmann's solution, or a combination of sugar and saline with one-third orange juice. Weak tea usually with added sugar has had many advocates. The time-honored rule for the fluid requirement of a normal infant is: 2½ ounces per pound of body weight per day. Additional fluid must be given to counteract abnormal fluid loss through diarrhea or vomiting.

Patients who have vomiting, distention, and severe diarrhea, and especially the extremely toxic infants already referred to, require parenteral fluids. Dehydration and acidosis are almost surely present in the more severe cases and the younger the child the more pronounced and serious are the consequences of loss of water and electrolytes.

The classical signs of dehydration in the small infant: inelastic skin, sunken eyeballs, depressed fontanel, and dry mucous membranes are usually quite evident clinically. However clinical diagnosis of dehydration in cases of severe malnutrition or recent marked loss of weight or in babies with a great deal of subcutaneous fat may be quite difficult. Bridge[4] has suggested using determinations of serum protein concentration as a laboratory guide to the degree of dehydration.

Acidosis is more difficult to diagnose without laboratory aid than is dehydration. Certain clinical features however are helpful in at least suggesting the presence of acidosis. The most striking of these when present are respirations of the air-hunger type, i.e., deep, rapid, pauseless breathing. In the moribund or premature infant this sign may be absent. Besides this the signs of dehydration in the skin are present, there is some degree of stupor, the urine is quite concentrated and strongly acid, acetone breath and cherry-red lips are evident.

If the CO_2 combining power of the blood is known, the amount of alkali necessary to raise the CO_2 to approximately normal can be calculated. Sodium bicarbonate can be given intravenously. It may be used subcutaneously only when it is diluted and specially prepared. Sixth-molar sodium lactate may be administered either subcutaneously or intravenously and may

be combined with saline, Ringer's or Hartmann's solution. Each 30 cc. of sixth-molar sodium lactate per kilogram of body weight of the patient raise the CO_2 approximately 15-18 volumes percent. Practically always patients require more fluids to combat their dehydration than are provided in the amount of alkali given. Saline, Ringer's or Hartmann's are used to complete the patient's fluid requirements. Usually these are combined or alternated with 5-10% glucose solutions. As long as dehydration is present a transfusion is contraindicated, but when hydration is attained whole blood or plasma should be given to combat anemia, hypoproteinemia or chronic nutritional disturbances.

The custom of withholding food for 12-24 hours, or even longer in severe cases, has been rather generally agreed upon as sound treatment in diarrheal diseases. Also the principle of feeding a low-fat, low-residue diet is rather well accepted. A regime of high protein and moderate carbohydrate is usually followed. For babies a lactic acid-evaporated milk formula with 5-10% carbohydrate or casec is quite satisfactory, beginning after the period of starvation with a weak mixture and increasing as the baby improves until the total caloric requirements are met. Adequate vitamin intake should be assured throughout the course of the disease, especially vitamins B and C. Banana and apple diets both of which were in vogue for a time have given disappointing results as specifics against dysentery, but both are apparently tolerated very well by patients. Likewise the therapeutic value of apple powder, pectin, and nickel pectinate has been questioned.

Polyvalent dysentery serum is available, but has been of no demonstrable value in children.

The specific treatment which at present appears to be most hopeful in cases of bacillary dysentery is sulfonamide therapy. Sulfanilamide is not to be recommended, but sulfapyridine, which has been little used in this country for dysentery, sulfathiazole, and sulfaguanidine are effective. Newer sulfonamides, sulfadiazine and succinyl sulfathiazole, may prove to give better results than either sulfathiazole or sulfaguanidine, but their trial is incomplete as yet.

The dose of sulfaguanidine recommended by Marshall who made studies of blood and stool concentrations after varying dosages has usually been followed at least in a modified form. Marshall recommends an initial dose of 0.1 gram per kilogram, a maintenance dose of 0.05 gram per kilogram every four hours till the stools number four or less, then 0.1 gram per kilogram every eight hours for three days. 1½ grains per pound of body weight is the dose of sulfathiazole usually given for the first two or three days followed by a maintenance dose of one grain per pound usually for 2-4 days.

Sulfaguanidine is fairly soluble in water but poorly absorbed from the gastro-intestinal tract. Therefore it is possible to produce a high concentration, up to 200 mg. percent in the intestine, but a relatively low concentration in the blood, i.e., 1-4 mg. percent. It inhibits in vitro colon organisms. It is practically tasteless and is usually given to children in a suspension of water or milk. It cannot be given parenterally, but can be administered rectally.

In cases of persistent vomiting or coma sulfathiazole may be given as the sodium salt in 5% solution intravenously or in 0.3-0.7% solution subcutaneously. Some cases of dysentery which fail to respond to sulfaguanidine will respond to sulfathiazole.

Toxic effects of sulfaguanidine have been reported, viz., nausea, vomiting, headache, drug fever and conjunctivitis, but are said to be less frequent than with sulfathiazole. It is extremely important when administering either drug to make certain that fluid intake and urinary output are adequate.

Reports of the use of sulfathiazole and sulfaguanidine in the treatment of bacillary dysentery are rather consistently favorable, especially if their administration is begun early in the course of the disease. Some physicians report dramatic results with the drugs comparable to the effects of the sulfonamides in pneumococcic pneumonia. In some cases response is spectacular, clinical improvement occurring within 12-24 hours, temperature becoming normal in 1-2 days, stools in 2-3 days. An important effect of early treatment with these drugs is to eliminate the initial period of starvation because patients are able to take food and have desire for it. In some cases vomiting has ceased after treatment was started. Another important observation has been that dehydration once overcome did not tend to recur as it did before the institution of sulfonamide therapy. In diarrheas where Shigella organisms were not recovered the results have not been conclusive. These

drugs apparently do not alter the course of typhoid fever.

SUMMARY AND CONCLUSIONS

Progress is being made in combating diarrheal diseases in Kentucky.

1. Public health measures are bringing about a gradual decline in the incidence of these diseases.

2. Improved laboratory techniques are making it possible to more accurately diagnose and classify them.

3. Certain of the sulfonamides are effective in the treatment of the infectious group of diarrheas caused by the dysentery group organisms.

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DISCUSSION

W. Clark Bailey, Harlan: One of the things that I notice in most of the patients with bacillary dysentery is the fact that you can elicit a history of an unscreened house where there are a lot of flies about.

One of the most important advances in the treatment of diarrhea is the sulfonamide group. With the use of sulfaguanidine in the child who presents itself with vomiting and diarrhea, with the withdrawal of all food for twelve hours, you are able to control the vomiting in the majority of cases, shorten the period of lack of fluid intake, and obtain so much better results from treatment.

The treatment in diarrhea is built around the overcoming of dehydration, acidosis and the diarrhea and vomiting. Dr. Chenoweth has presented to us these methods which I think will greatly reduce the mortality of diarrhea. With reduction in the incidence of diarrhea through public health measures and through the mortality reduction of diarrhea, especially bacillary dysentery, with the treatment of the sulfonamide drugs, we shall expect a great reduction in the death rate in the State of Kentucky. I think that it is to be expected. Certainly through the use of the group of sulfonamides, we are very fortunate in being able to do more for this great group of enteritis that heretofore in a great many cases could not be helped.

Fred Caudill, Louisville: We have now had considerable experience in identifying the various types of organisms responsible for bacillary dysentery in the State.

As you saw from the graphs shown, particularly the one that put diarrheal diseases in their proper place as a cause of death in the State, these diseases led the list of causes of death among children under five years of age. I think we now have enough evidence to indicate that most child diarrhea is actually bacillary dysentery and a contagious disease. We also have abundant evidence that the measures which have adequately controlled typhoid do not as adequately control bacillary dysentery. There are reasons for this, one of which was pointed out in the paper and which I wish to emphasize. In the first place, we have specific vaccine for the prevention of typhoid. In the second, bacillary dysentery is spread, we think, largely in a different way from typhoid. Typhoid is spread largely by water, milk and other food, whereas bacillary dysentery is chiefly spread by flies and by direct contact between the well and the sick.

We had proof of this the past summer in an epidemic of bacillary dysentery caused by the Shiga bacillus. That was the first time this organism had ever been recognized in the State and, perhaps, the first time it has appeared in in the State.

The fact that bacillary dysentery is largely transmitted by flies and by direct contact, furnishes fairly good evidence that bacillary dysentery is likely the most widespread and that the mortality rate from the disease will go up in direct proportion to the prevalence of flies. In view of the fact that these are the two ways by which the disease is spread, practicing family physicians can be of great aid in the control of the disease. I think one of the most vicious ways of spreading bacillary dysentery is through soiled diapers taken off babies by mothers in homes where there are no screens and outside of which homes are wide-open privies with flies, of course, swarming in those homes. These diapers lying on the floor, in the corner of the room, or out on the porch, attract swarms of flies which then go back into the home and to the homes of neighbors, thereby making the sick baby's excreta a common commodity in all. Here is one place in which the family physician can help. When he sees a case of diarrhea in a child, he should tell the parents that it is an infectious disease, easily spread and that it is spread largely by flies and by direct contact through visiting. He also tells them how properly to dispose of the excreta from the sick child and warns them to stop visitors. In this way physicians can make a big contribution to the control of the disease.

Dr. Chenoweth spoke about the treatment of the disease. In the light of the fact that this is an infectious disease, that it is caused by a living organism getting into the intestinal tract and multiplying and causing inflammation of the mucosa of the tract, it would certainly tend to contraindicate drastic purgatives. These would only tend to increase the inflammation. I am glad the pendulum has swung away from such treatment.

I would like to plead with you now to report your cases more completely so we can learn

more about the true prevalence of the disease. We base all our studies on deaths. It isn't a compliment to practicing physicians or to public health in the State always to have to base all of our studies of the detrimental effect of disease on the population, on the deaths in the population. We shouldn't wait until they die to do something about it. You should report your cases and let us begin to do something about them before they die.

A. T. McCormack, Louisville: In the treatment of diarrheal diseases in infants, one of the prescriptions you want to give to everybody is to have a sanitary privy. You want to give that to every patient that you see, and intelligently explain, make it perfectly plain, that they need the sanitary privy. In the second place, prescribe screens and emphasize the fact that the screens are more dangerous than not having screens unless they are made fly proof. If openings are left at the bottom of doors and windows, if openings are left in the windows about the screens, more flies will get into the house, and those that get in have more difficulty getting out except when you open the doors and when folks go out. If you explain that to them so they understand it we can gradually build up a defense against this disease. That is the only way we are going to be able to do it. That is of the utmost importance. It helps in so many other ways that there is no question about it.

Of course, there is one other thing that we will eventually get in Kentucky and in the United States, and that is that fly breeding is in manure, and manure does a lot of good on land if it is spread and plowed under; it does a lot of harm if it is kept in barns around the house. If we just get the idea that all our land needs manure and none of our people need it, it will be of great help economically and will enable people to raise more food and have that food more available and they would be economically better off and certainly would be better off from the standpoint of their health.

Philip Barbour, Louisville: I think perhaps more than any of you I have had a chance to observe the treatment of diarrhea through a great many years. I have seen all kinds of fads and fancies in the treatment of this disease.

I am sorry that I have come to the time when I can not use these new drugs that are being recommended. When summertime came around in our Children's Hospital we used to dread the cases coming in day after day and going out in a very short time in a coffin. It was just one of the horrors of summertime service at our Children's Hospital. Now we have some hope of doing them some good because the sulfonamide group certainly is furnishing the best method of treatment that we have evolved up to this time.

Dr. Chenoweth has given a very carefully thought-out paper. When you get the copy of your Journal, read it over slowly and carefully and you will get a great many valuable points in the treatment and the handling of your case.

I want to emphasize just a few points. One is the importance of protecting the family against infection from diarrhea—other members of the family. I had one extreme case of a family in which there were seven sick at the same time with dysentery, two of them died. That is the worst experience I have had. It is a highly infectious disease and we must emphasize to the people the importance of taking care of the stools immediately after they are passed. If you get into a poor home and watch the diaper laid on the floor you will see a group of flies on it almost immediately. These stools must be put into an antiseptic solution as soon as they are passed, otherwise flies will be infected and other members of the family are going to get the disease. This is so true that even in hospitals we sometimes have difficulty in checking epidemics of diarrhea; even with the careful technic of a hospital we still have these cases going from one child to another in the hospital. How much more important it is in the private home where they have not all the facilities for the disinfection and taking care of the stool.

Dr. Caudill brought out another point, and that is the importance of keeping other children out of the house where there is a case of diarrhea. Country people have a way of visiting the sick, and they take all the children along, and thus the disease is spread from one to another.

In view of the fact that dehydration is going to occur in these cases, it seems to me very important that we get water into the child as soon as we get the case. By getting the water into them before they have reached the dehydration stage, you can anticipate this loss of fluid.

One other point I would like to bring out. In our experience it seemed to me that I got very much better results if I skimmed carefully all the cream off the milk and boiled the milk before I gave it to the child, and when the child was convalescing before I returned the child to the regular diet. I have often seen these children who are getting better take whole milk with the cream on it and suffer a relapse.

It is important to keep irritants of all kinds away from a mucous membrane that is inflamed and congested and ulcerated as is in dysentery. Therefore the use of large doses of calomel

or castor oil should be taboo.

T. Atchison Frazer, Marion: We know that diarrhea is one of the things that comes early, and it is hard to give fluids. I have been giving fluids per rectum, a half ounce of sterile water in a syringe every two hours. I have succeeded in many, many cases in giving the child all the fluid it needs. I know a good many people who don't believe that the rectum will absorb sufficient fluid, but if you will try it and try it persistently, you will find that you can overcome or prevent denyoration by fluid in the rectum, and with these small amounts it rarely returns but is absorbed. I have watched many, many cases. I have had long experience in the practice of medicine and I still feel I am a young man. Dr. Barbour and I are two of the youngest men in this Association. The definition of an old man is one who dreams dreams, but the young man sees visions, and as long as we see these visions we are still young.

CLINICAL PATHOLOGICAL CONFERENCE, CASE REPORT

E. S. Greenwood, M. D.
Louisville

This case is presented as it offered a problem in diagnosis which was not solved until the patient was in the terminal stages even though the patient had the benefits of examination, observation and all available laboratory work from the time of onset of symptoms.

The essential feature of the case was an intermittent fever with occasional chill. The patient was a 60 year old white female who had an illness of eight months duration from September 17, 1941 to May 3rd, 1942 when the patient expired. When first seen she complained of weakness, occasional bouts of fever with chills occuring at regular intervals, headache accompanying the fever, itching of the skin over various parts of the body, and occasional pain on urination. The patient was not thought to be acutely or seriously ill and was allowed to be ambulatory from September 1941 until April 6th, 1942 when the symptoms increased in severity and the patient was hospitalized.

The lines of investigation were those usually used to rule out chronic and unexplained fever and included the following:

(1) History: the past history and family histories were negative.

(2) Physical examination. Until the final stages the physical examinations were negative.

(3) Laboratory and X-ray examination as follows: Smears for malaria, agglutination tests for malta fever, the typhoids, tularemia and undulant fever, sputum and blood cultures were negative. Blood counts taken at various periods of illness were noncontributory with the hemoglobin ranging between 80 and 85%, the red count between 4 and 4.3 million red corpuscles per cm, and the white count showing a very gradual drop from a total of 7,450 to 4,500. The differential counts were all within normal limits, but there was a gradual relative increase of polymorphonuclear neutrophiles.

Stool was negative on culture and for parasites, but showed some occult blood on one occasion.

Urine on several occasions was negative until the week before her death when it showed albumin, a faint trace of sugar, trace of acetone and an occasional pus cell. The blood non-protein nitrogen was normal.

Cholecystograms, gastro intestinal series and extensive X-rays of the sinuses were negative.

X-rays of the chest by Dr. Oscar Miller were negative for clinical tuberculosis; present was considerable capillary fibrosis, a hazy left apex suggestive of past tuberculosis.

Later a fluoroscopic examination of the chest by Dr. J. C. Bell was again negative. Skin test for tuberculosis was one plus.

For the first seven months of illness treatment was empirical and included antiphoretics, analgesics, antirheumatics, sulfathiazole, sulfadiazine, sodium sulfapyridine, tonics, intravenous thiamine chloride, suprarenal cortex, vitamin B complex capsules, transfusions and i. v. infusions.

The treatment was of no avail and the symptoms gradually increased in severity with weakness becoming very pronounced. The patient was hospitalized on April 6th. While in hospital she lost weight rapidly, developed persistent cough, and on April 10th it was noted she had a lack of balance. By the 20th of April she developed persistent vomiting and severe headache, lapsed into coma by the 27th and died on the 3rd of May.

After the development of coma a spinal tap was done and the spinal fluid showed marked increase in pressure, a turbid, colorless fluid. The globulin was 2 plus, the total protein increased to 220 mgms,

Read before. the Jefferson County Medical Society.

the chlorides dropped to 590 mgms, the sugar was normal, the Kahn and Wassermann tests were negative, the colloidal gold curve was of the leutic type, and the total cell count was 125 with 80% polymorphonuclear neutrophiles. No bacteriology was done at this time.

It was found at autopsy that the patient had tuberculous meningitis with extensive miliary tuberculosis of the lungs, pericardium, kidneys, adrenals, spleen and liver. The lung lesions were very extensive and looked a bit older than those in the other regions. There were marked old pleural adhesions with obliteration of both pleural cavities.

DISCUSSION

W. H. Allen: This patient was referred to me, several months before Dr. Greenwood came in contact with her, with the hope of finding some laboratory result that might aid in making a diagnosis.

I first saw this patient on January 12, 1942. The doctor in the case had previously talked with me concerning this patient. who had been running fever for a month or more. This increase in temperature occurred daily, though never extremely high, probably as high as 100 or possibly between a 100 and 101, and the doctor had been unable to account for it.

At that time I had recently seen a patient with similar clinical symptoms who proved to have undulant fever. We felt this patient also had undulant fever so one of the first procedures was to run an agglutination test, which was negative. Agglutination tests were also made for typhoid, para typhoid and tularemia, these likewise were negative.

A specimen of urine was then examined, which was entirely negative from a diagnostic standpoint.

I felt we should not stop with this one effort to prove the possibility of these symptoms being caused by undulant fever, so we asked the patient to return at a later date for a check up, which also proved negative. The patient did not appear especially ill, though she had lost in weight. She was free of pain and was of a happy, jovial disposition.

At this time a blood count was made, showing the erythrocytes and hemoglobin practically normal and there was nothing of diagnostic value in the leucocytes. We were still hopeful of finding something so the patient came back a third time and the blood tests were all still negative. We did a tuberculin skin which was negative. The metabolism was within normal limits, showing nothing of significance. The stool was cultured, with negative results from a diagnostic standpoint. We had nothing to account for this patient's temperature though we felt we had at least ruled out several possibilities.

However, after hearing Dr. Greenwood's findings, I was not so sure even of that.

O. O. Miller: I have already committed myself to an opinion. The time I saw the patient her chest was negative for pulmonary tuberculosis or any other infection. Her tuberculin test was positive. Since the patient developed a cough during her period of hospitalization, it is quite possible that she may have developed a terminal bronchitis or broncho-pneumonia. I do not believe it represents a malignancy, because in this condition there is a marked anemia and a marked loss of strength. A diverticulosis is also capable of producing a long continued fever. The capillary fibrosis spoken of in the X-ray report is a natural concomitant of the aged. It is also seen in the first stage of silicosis.

SOME SUGGESTIONS FROM AN OCULIST TO THE GENERAL PRACTITIONER

J. D. Williams, M. D.
Ashland

It has occurred to me that some suggestions from the standpoint of an oculist in respect to the commoner eye problems that frequently present themselves to the busy general practitioner might be of value and accordingly I have undertaken in this short paper to discuss with you some of their phases, some of which are capable of much misinterpretation.

In the matter of foreign bodies it is well that the patient should sit facing a window as the reflection from the daylight, patterned by the frame bars, is often better than the strongest artificial light in detecting the injury. If the time of day necessitates or if one prefers artificial illumination the light should be powerful, it can hardly be too strong, and at the patient's side. Then with Pontocaine or Butyn anesthesia and a very sharp sterile instrument, a small needle will do very well, the foreign material may be removed from the cornea, some Butyn ointment applied beneath the lids, the eye tightly closed and a firm dressing applied that the lids be as nearly immobile as possible. It is, of course, a prerequisite that the physician have perfect vision and a steady hand. If, however, there was left a deep injury or even considerable denudation of the epithelium the question of atropine

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then presents itself, but this drug will be considered later in the paper. If, again, the history, always important but by no means always to be depended upon, is of a splinter of wood or metal, as in an industrial plant, the picture is entirely different since serious perforation of the bulb into the interior is likely, then the powerful magnet, the ophthalmoscope, the X-Ray will have to be resorted to, since serious damage to the very depth of the eyeball is hardly to be questioned.

In case of lime burns it is perhaps better not to attempt neutralization with chemicals else the precipitation would add to the difficulties of removal. This injunction does not hold against soda or other alkali solutions in acid burns. After Pontocaine anesthesia, copious flushing with saline solution is indicated and in the absence of a capacious syringe a small pitcher, found in every home, will serve admirably.

Again as to atropine, a drug absolutely indispensable in iritis in which case, of course, the pupil will be small or perhaps of normal size, but the use of the drug in the presence of an enlarged pupil could be such a tragic mistake as to produce irretrievable blindness within a few minutes. It is well to be ever suspicious of ocular hypertension in persons past mid-life, certainly so from the 6th decade. Let us suppose, for example, you were called to see an elderly patient suffering with severe pain in the head and vomiting, with or without eye symptoms. In that event you might well resort to your hypodermic syringe which incidentally would be a very proper procedure in the likely event of its being a glaucomatous attack, morphine being then the most effective immediate treatment, narrowing the pupil, reducing the tension and relieving the pain.

Apropos of the suppositional case mentioned, recently there came to me a lady of 64 years with complete blindness of one eye, from glaucoma. The pupil was twice the size of the other one. Two years ago while visiting in California and suffering greatly in the night a physician was called who diagnosed iritis and administered atropine. The next day an oculist was consulted and directly opposite treatment was instituted and vigorously pushed. It was too late.

If it were feasible to take the eye tension of elderly people between midnight and dawn—those particular hours—many cases of simple or non inflammatory glaucoma or those of the incipient congestive type could be uncovered that otherwise would escape detection, and early recognition is of such vital importance.

Statistics tell us that from 15% to 20% of all blindness is due to glaucoma. While the general practitioner has not the armamentarium of the specialist he has his tongue, his eyes and his finger tips. Then should it not be a routine to inquire, to observe and to feel the eyeballs remembering that there is hardness in glaucoma, softness in iritis, a large pupil in glaucoma, a small one in iritis, pain or no pain in glaucoma, depending on the type, certainly pain in iritis, and there are certain premonitory signs in glaucoma such as attacks of dimness of vision, halos about lights, slight headaches in the afternoon, etc.

Exophthalmus of both eyes is readily diagnosed as Graves or Bazedow's disease, a manifestation of hyperthyroidism. However, if of one eye only it is a symptom of many etiological factors some of which are syphilis of the orbital rim; aneurism of the orbital vessels; relaxation of the external eye muscles; diffuse hemorrhage back of the eye; tumor of the optic nerve; necrosis of the bony orbital rims; cavernous sinus thrombosis; even abscess of a tooth socket. (In a recent Green's Hospital Bulletin an illustrated case is reported where the eye had been removed on the assumption of an orbital abscess. Actually it was from a frontal sinus infection draining into the orbit; the eye could have been saved.) Should the bulging eyeball prevent closure of the lids serious damage from dessication of the cornea will ensue unless it is protected by frequent use of oils or ointments. A still greater measure of safety is had by keeping the eye covered with a watch glass or a piece of celluloid to favor humidity.

A matter of special significance to the elderly is infection of a tear sac. Age disposes to obstruction of the sac and ducts, the sewers of the eye. The secretion is of such virulency that at the very slightest injury of the cornea in this age group the eye may be destroyed with startling rapidity, whatever the treatment. Indeed no eye surgeon would have the temerity to attempt any intraocular operation in the presence of such a condition.

Now a word about headaches in respect to the eye. Since a very considerable portion of the brain and cranial nerves is devoted to the requirement of sight and that

four cranial nerves and a part of two others are used almost exclusively for the function of vision it is easy to see why there are so many ocular head symptoms. A good, rough working rule is to inquire particularly as to the time of their onset, rather arbitrarily deciding that their presence before the patient arises from the recumbent position is suggestive of a nasal sinusitis in which the discomfort lessens, or entirely disappears, on assuming the upright position or after dressing. Contrarily if he suffers no earlier than from a few minutes to hours after that time, the pain persisting perhaps throughout the day or into the night, suspicion must be directed to the eyes. The location of the discomfort is not of so much significance as, while it should be in the frontal region, it often is felt at the base of the skull and back of the neck, in eye strain.

Hundreds and hundreds of perfectly good eyes of young children, sacrificed by lack of attention at the appointed time, have come under my observation and the thing has become so notorious that a great organization, The National Committee for the Prevention of Blindness, is vigorously propagandizing throughout the nation in the interest primarily of the squinting child. Hence, the great obligation that rests on the general practitioner when the frightened mother comes to him to say her child is cross-eyed.

It is indeed a most serious matter and her fears are well founded since the deviating eye without proper attention at the proper time will almost inevitably become blind. Then the wise physician will not in this day banish her fears by assuring her that the child "will grow out of it." Nor will he be equally derelict of his duty in permitting glasses to be fitted by an optician or socalled "Eyesight Specialist." On the contrary he will instruct the parents that the eyes must be tested under the full effect of three days use of atropine to the end that the total error be found and the strongest lenses so determined be placed before the deviating eye and this at the earliest age practicable which may be as early as the first anniversary, certainly in most of these little patients, after the second year. This alone or aided by muscle training will save the vision of the great majority that otherwise would be lost before the eighth year since in the meantime the child and nature together will have suppressed the image and given up the sight in the squinting eye to avert the annoyance and dangers of double vision.

It is a law of nature that every living thing must exercise to retain its usefulness. If the eye does not function it loses its power to do so and there is no recall. After the eye has become blind from non use no operation will restore any part of the vision; surgery availing only in the cosmetic sense. And the deformity of a squinting eye not only affects him socially but very materially prejudices the individual's earning capacity throughout his life.

This beautiful quotation from the pen of Daca de Valdes is, I hope, not inappropriate: "The most perfect among the human senses is that of vision and in this overpowering world, the fabric of the eyes is the most admirable in man, just as the Sun and Moon are the eyes of the Heavens; because the eyes are the Suns of the human body; the beauty and fineness of the countenance, the windows of the soul, the clean gayety of nature."

DISCUSSION

Adolph O. Pfingst, Louisville: I have, for a long time, been impressed with the mistake so frequently made by those engaged in special departments of the practice of medicine, and more especially by those confining their practice to Ophthalmology, that when presenting papers before a general society like ours, they enter into technicalities of little practical value to one occupied in the practice of general medicine.

Dr. Williams has definitely avoided this mistake and has given us some valuable suggestions, which we should take home with us and profit thereby. This is the kind of contribution that we need on the programs of our State Society.

Dr. William's paper brings to mind two thoughts of practical value; first regarding foreign bodies of the eyes, in which I would impress the importance, regardless how trivial the injury may seem, of taking note as to when, where and how the injury occured and filing this along with the result of a functional test of the vision of each eye, tested separately. It has been my custom to impress this upon my classes in medical school as such records would prove of inestimable value in the event of an eventual indemnity suit. Incidently it would seem well for every one engaged in general practice to have his office equipped with a Snellen test chart.

Speaking of foreign bodies of the cornea it has been my experience that, as a rule, the removal is not so difficult and the cornea is

not liable to a great deal of traumatism. However in many instances, after removal of the foreign body a light brown surface, resembling rust, remains and in its removal considerable difficulty is encountered and in inexperienced hands considerable surface epithelium of the cornea is often scraped off. The ordinary spud or other gadgets ordinarily employed on the removal of corneal foreign bodies are not very servicable. It requires a more pointed instrument and a fine pointed needle well answers the purpose.

My second thought applies to the relation of the Ophthalmologist to those active in other departments of medical practice. We know that even in Hippocrates' time the association of eye diseases and general conditions was recognized. However this close relation between ocular conditions and general diseases and injuries has become more and more apparent with the advance in medical science, more especially in the last two centuries. In this connection the discovery of the ophthalmoscope by Helmholz, in the middle of the last century is most worthy of acclaim for it has enabled us to inspect the blood vessels within the eye and thus opened up an important adjunct to diagnosis, especially in renal disease, diabetes, syphilis and tuberculosis. It has also been invaluable in the study of disease and injuries of the cerebro-spinal system. This has been instrumental in bringing about the close relationship which now exists between the neurologist and the neuro-surgeon and the oculist.

The advent of the neuro-surgeon and the more intimate study and coincident successful treatment of intracranial conditions has been a big factor in the development of perimetry. Although the study of changes in the visual fields is not of recent origin, it is a fact that, up to the last few decades, the use of the perimeter played an insignificant part in the routine of office work of the Ophthalmologist whereas today. with technically improved apparatus, the coincident development of technique of recording visual field changes and the greater appreciation of the importance of perimetric study has made of the perimeter one of the most essential gadgets in the equipment of the Ophthalmologist's office.

I believe in the free public training of both hands and the minds of every child born. I believe by right training of men we add to the wealth of the world. All wealth is the creation of man and he creates it only in proportion to the trained uses of the commonwealth; the more men we train the more wealth everyone may create.

BLAST INJURIES TO EYE AND EAR

Walter Dean, M. D.
Louisville

Bombing open cities had its innovation in the international war in Spain a few years ago; was technically improved and magnified over the English and Scottish cities two years ago, and I hope will soon reach its acme, its zenith, its perfect flower over Berlin.

Fulton, of Yale, gives us a street picture of the destructive effect of bombs. He states that in the 19th century, "explosive balls of fire" were known as bomb shells. By the end of that century, and during the last war the word bomb was reserved for explosives dropped from the air. When a one hundred pound bomb strikes the middle of the street, it penetrates beneath the surface before exploding and then lifts up a heap of dirt, leaving a crater 20 to 30 feet in diameter, 3 to 5 feet deep, and the blast produces destruction within a sharply circumscribed space for a width of 20 to 25 feet. A five hundred pound bomb makes a crater 75 to 100 feet in diameter, 8 to 10 feet deep, and the blast causes destruction for a width of 100 to 130 feet. Windows are broken up to 600 to 750 feet. A one thousand pound bomb causes incredible destruction and is capable of demolishing the greater part of a block. When a bomb explodes in a confined space, as in a building or in a ship, the blast effects are many times intensified. In addition to the blast wave in the air there is also a ground shock which may topple buildings at many hundred yards. He says that if the British are using bombs weighing one or two tons the havoc must be colossal.

Zuckerman, of Oxford, said in the Proceeding of the Royal Society of Medicine, January 6, 1941, "More tons of bombs are dropped on this country almost every night than were dropped in the whole of the 1914-1918 war." When a bomb detonates, the solid explosive is converted into gases which initially are confined in the casing at a pressure that has been variously estimated as between 100 and 650 tons per square inch. As a result of this pressure, the casing is blown to pieces and the gases escape and by their expansion produce a blast wave in the surrounding air. The blast wave is a single pulse of increased pressure followed by a phase of suction. The wave moves much more rapidly than sound close to the explosion and, in the

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case of a medium sized bomb, falling to the velocity of sound (1,120 feet per second) at about 200 feet. The total duration of the whole wave within 200 feet of the explosion is very brief. Thus at 30 feet from a 70 pound charge the pressure component lasts 5 and the suction component 30 milliseconds. The maximum pressure of the wave is highest in the region of the explosion and the pressure falls rapidly the farther the wave moves from the source of the explosion. In the case of a 70 pound charge the pressure falls approximately as follows: 14 feet, 110 pounds; 18 feet, 60 pounds; 30 feet, 15 pounds; 50 feet, 6 pounds.

In experiments on small mammals he found that animals immediately adjacent to an explosion were blown to pieces; at pressures approaching 100 pounds per square inch were certainly killed; at pressures of 5 pounds no lesions were observed.

Prof. Zuckerman's research was confined to the effects of pure blast, he being interested in the lesions in the various internal organs in animals showing no external injuries. By itself blast will not cause external bruises, except of course when an individual is close enough to a bomb to be blown to pieces.

In conclusion, he emphasizes two points: The first is that fatal casualties with little or no external sign of injury will probably only in rare instances have died from the direct effects of blast alone. Other causes of death in such circumstances are asphyxia following burial under debris, carbon monoxide poisoning and death from chronic diseases aggravated by sudden shock. Whether blast can cause death as a result of a sudden nervous crisis is a matter which at present is only open to speculation. The second is that bruising of the lungs may occur not only as a result of the direct action of blast, but also as a result of secondary and tertiary blast effects such as violent displacement and the impact of flying and falling masonry.

Zuckerman's research is in agreement with the clinicians' opinion that the blast pressure must rise to six atmospheres or 100 pounds to the square inch before endangering a human being.

Surgeon Commander E. R. P. Williams, of the Royal Navy, explains blast in water in the British Journal of Surgery. In the explosion of a depth charge, the pressure wave travels at the same speed as it does at first in air, i.e., 5000 feet per second and it should be noticed that this is the same as speed of sound in water. The rate of fall of hydrostatic pressure is much slower than in air, so that pressure effects will be experienced over a much greater distance in water than in air. The pressure wave in air decreases proportionately to the square of the distance from the center of the explosion. He explains that the human body has roughly the same density as water. When the pressure wave impinges on the body, there will be no reflection but the pulse will be transmitted thru the tissues without displacement just as if the body were so much water. However, when the transmitted pulse encounters an air cavity in the body, such as in the lungs or colon, the static wave of pressure will change into a wave of kinetic energy in the layers of tissue lining that cavity and a disruptive effect will occur. Hence it can be understood that the lungs or other gas filled cavities in the body are particularly susceptible to damage from the pressure wave even though the body itself may not be deeply submerged in water. In conclusion, he reports examples of blast lungs, blast abdomen, blast eyes and ears of men in the sea injured by depth charge. These cases had pathology similar to blast in air.

Returning to the circumstances under which injuries may occur in air raids, it is to be noted that besides the impact of the blast wave on the body causing lung and ear casualties, there are flying splinters of the bomb cases, flames from the explosion, carbon monoxide liberated in enclosed spaces, and the chance of being hit by the bomb itself. The bomb casing breaks into a multitude of tiny fragments which travel with tremendous velocity. Because of their small mass, their velocity is rapidly lost but in the immediate neighborhood of the explosion, the velocity of the bomb particles, 4000 feet a second, is far above that attained by a bullet. In the Surgery of Modern Warfare it is stated that a particle traveling at such velocity has a devastating effect on the tissues. Whilst on the surface there appears only a trifling wound, beneath the skin there is a wide spread of destruction that has to be seen to be believed. This destruction is the result of the momentum imparted to the soft medium by the high velocity projectile, so that there is produced an effect similar to that of an internal explosion.

Secondarily, the victim may be blasted against a hard surface displacement or be

bowled over by a flying splinter.

Thirdly, the victim may be hit by secondary missiles, e.g., flying masonry, wood, furniture, glass, girders, and by falling walls, etc.

Lastly, the victim may be asphyxiated from burial under debris, burned, drowned or poisoned by carbon monoxide from bursted gas mains. London gas mains are only 3 feet under ground.

Blast Injuries to the Eye and Ear

A review of the Proceedings of the Royal Society of Medicine, The British Journal of Ophthalmology, The Lancet, The Practitioner, The Surgery of Modern Warfare and The Bulletin of War Medicine, convinces me that their authors and clinicians are hardly ever sure that any given patient is the victim of pure blast alone. The point is made that it is an entity, but neither they nor I care to be academic about it. The circumstances of the assault, one might say the super assault, are so chaotic that any orderly sequence of events cannot reasonably be deducted. Compare our puzzlement over the bizarre lesions of automobile accidents.

The blast has blown to pieces hundreds of British civilians; it has killed many leaving no external mark; it has killed some leaving no pathology, and it has damaged thousands. The damage is usually to the vascular system. The vascular system is least elastic. The most vulnerable organ is the lung. Sometimes the lung is lacerated but usually the lesion is alveolar, is of the alveolar capillary network and the hemorrhage is alveolar and interstitial. The hemorrhagic lesions are usually spotty, more in the base, mostly on the side of the blast. There is vasodilation of the whole lung on both sides, and edema and pneumonia may develop. If the patient dies slowly, the lung may become hepatized. The symptoms are shock, haemoptysis, cyanosis, dyspnea, air hunger, breathing is fast and painful. The following factors minimize the risk of blast: old age, obesity, rigidity of the chest wall, the position of expiration and thick clothing.

The colon is the most vulnerable viscus in the abdomen. Hemorrhages and subparietal rupture have been observed without breach of skin. The stomach, liver, and spleen have rarely been observed to be ruptured and more rarely the kidneys and adrenals. Haematuria occurs in a fair percentage, usually with no other signs of renal lesions. The gall and urinary bladders are almost immune.

The actual force of blast is not usually sufficient to produce concussion of the brain, tho bloody cerebro-spinal fluid has been repeatedly noted. That effects on cortical functions are seemingly slight is a tribute to the protective value of the skull. "Had the brain suffered a fraction of the injury seen in other organs further search for a cause of instant death would have been superfluous." A direct effect of blast on the central nervous system cannot be excluded as a factor in the fall of blood pressure which follows explosion.

The psychogenic syndrome called shell shock is not mentioned, probably because it is so obvious, so threadbare. Some of the so called psychic effects: mental confusion, hallucinations, hysterical deafness and blindness, impediments of speech to actual mutism and tremors may be due to molecular disturbances of the central nervous system.

Haemopericardium has been observed, as yet no changes in the myocardium or endocardium have been found microscopically. Associated with sudden death, right-sided dilatation was fairly constantly observed, concussion anaemia has been noted.

Trueta's Barcelona figures show that from 30 to 60 percent of Barcelona air raid casualties sustained damage to the ear drum, 50 percent of which developed supperative otitis media. Negus reported that in London 31 percent of air raid casualties in the head and neck, 3.8 percent were of the ear. The ruptures and perforations were invariably limited to the tensa, except in fractures of the skull which may tear the flaccida too. The perforations were due to blast or rarely to splinters and secondary missiles. Bleeding was trivial or pronounced. Deafness was immediate and some times absolute. The tinnitus was an intense roaring. After two hours to two days, tinnitus subsided and hearing improved. But hearing was likely to remain defective and the subjective noises to persist tho becoming more tolerable. Giddiness and pain were less common symptoms and were not remarkable in degree. Purulent otitis media was a common complication but was usually painless because the perforation permits easy drainage from the beginning. It is possible for blast and missile injuries to affect the deeper parts of the middle ear and cause the same intracranial complications we find in civil practice. The in-

jury may affect the inner ear. Negus states that the cerebro-spinal fluid is often found to be bloody and that there is evidence beyond dispute that there is effusion of blood into the labyrinth too. He states that the auditory nerve shows minute hemorrhages, and that in extreme cases there are no doubt hemorrhages into the perilymph and endolymph systems, and possible damage to the sensitive fibres of the cochlea and the ampullae of the semicircular canals. Some one else states that in the group of cases in which the injury mainly affects the inner ear, the tympanic membrane often appears to have escaped injury. Some one discusses "concussion of the labyrinth." Hysterical deafness is observed.

The Uvea, most vascular and least elastic part of the eye, is most damaged by blast. Tears of the choroid and iris are common. There is iridodialysis, cyclodialysis, and splits in the choroid, all leading to extensive intraocular hemorrhage. The retina with its vessels may be ruptured, leading to large intraocular hemorrhages and to detachment of the organ. Smaller hemorrhages at the macula are observed. Traumatic cataract and both partial and complete dislocation of the lens have been observed. Acute iritis and acute secondary glaucoma have appeared to be entirely of traumatic origin. Proptosis due to retrobulbar hemorrhage and causing immediate loss of vision was observed once. Hemorrhages have been found in the fascial planes of the orbital cavity.

The cause of a high percentage of blindness is due to direct and indirect projectiles. Missiles have entered thru a small wound in the scalp of the occiput, traversed the brain, entered and disintegrated the orbit.

The tiniest splinters, on account of their enormous energy, tear thru the cornea and sclera and seem to cause an explosion in the eye. These missiles consist of the tiniest particles of stone, sand, cement, glass and any kind of dirt thrown by the explosion of a bomb. Myriads of lesser, slower particles stud the cornea. Lastly cortical centers may be damaged by larger traumas causing cortical blindness.

DISCUSSION

Adolph O. Pfingst: Mr. President—It has afforded me much pleasure to be present at your debut as presiding officer of our County Society and to hear Dr. Dean's exposition of such a timely subject. Inasmuch as I have never been in service in a combat zone and hence have had no personal experience in war injuries I feel a hesitancy in discussing Dr. Dean's essay. His approach to the subject was quite illuminating and of general interest, tho it offers little opportunity for discussion, as it relates to eye and ear casualties.

I was curious to know just what interpretation the essayist was going to give the title of his paper. Before I left home tonight I consulted the dictionary and learned that any of three definitions may be applied to the term "blast": 1st: It is employed to denote the explosion of the missile itself; 2nd: To denote a sudden strong current of air and 3rd: It is applied to a sudden and loud sound. The essayist has confined his remarks to the ill effects of sudden and forceful changes in air currents upon soldiers participating in ground combat hence I take it that this is the usual interpretation given the term.

The first World War offered ample opportunity to study cases of this kind and Ophthalmic literature, during and following the war, abounded in case reports and essays, relating to head and eye injuries due to increased air pressure and sudden displacement of air.

Most authors commented upon the absolute and relative increase in the frequency of head injuries and attributed this to the change in technique from open conflict to trench warfare. The latter, which consists of artillery activity, directed against stone and concrete fortifications, is associated with the dissemination of fragments of stone, concrete, gravel and soil by projected bombs, shells and shrapnel, inflict serious and widespread mechanical injuries in their course. The flying fragments may invade the eye-ball directly and bring about serious results by direct injury to vital structures, or by evacuating the ocular contents or by carrying infectious material into the eye-ball. It might be of interest here to note that cases of Sympathetic Ophthalmia, which formerly were the source of much anxiety on the part of the oculist, no longer present such a formidable problem, since the improved methods of treatment have materially lessened the frequency of such cases. In a report made during the first world war Sympathetic Ophthalmia was observed but once in 287 cases.

Larger fragments are known to have caused eye injuries indirectly by bringing about fractures of the bones of the orbit where pressure of bone fragments or laceration would seriously involve the globe.

However the cases referred to by Dr. Dean were not those attributable to direct injury of the eye by a foreign body or those occuring secondarily to fractures but to marked sudden

negative or positive pressure of air. Many cases have been recorded in which eye injuries were found, in which no evidence of an eye injury, to account for the ocular symptoms was apparent. Such patients suffer from a vibratory concussion or what is known as commotio retinae. Vision, in these cases is markedly disturbed, even to the degree of practically total blindness. Fortunately, however, complete or almost complete recovery takes place, unless associated with some actual lesion of the eye.

Greater destructive changes in the eyes have been recorded in which the ocular injury was attributable to air pressure, such as ruptured Choroid, detached retina and holes in this tunic, rupture of the ciliary ligament with partial luxation of the lens. Reports of cases of rupture of the sclera with complete dislocation of the lens under the conjunctiva have also appeared in literature. Cases of unilateral proptosis, which have been reported, were the result of retrobulbar hemorrhage which pushed the globe forward.

I would like to add a word of caution regarding these injuries of the face, with little or no external evidence of injury. These cases should never be taken lightly and should all be subjected to functional tests of the eyes, including a study of visual acuity, visual field measurements and estimation of the muscle balance, even in the presence of negative ophthalmoscopic findings.

DIETARY DEFICIENCIES, A REVIEW OF VITAMIN B DEFICIENCIES

John H. Kooser, M. D. *
Hyden

The interrelation of food and health has been well known since time immemoriam. In some instances these relationships have proved to be quite fallacious. Obsolete mountain pharmacopeias are full of misconceived ideas about foods and drugs. With the recent finding about foods the prescription for health becomes more distinct. One of the most important of these current food studies is that one which deals with Vitamin B. Within the past five years amazing progress has been made in the study of this vitamin, which has added materially to our physiological and clinical knowledge of the disorders due to a deficiency in it. Perhaps the chief impetus to this work was the discovery that nicotinic acid is effective in the treatment of patients ill with pellagra. As these investigations continue, several facts stand out very clearly. In the first place, pellagra and Vitamin B deficiencies are closely associated. Patients ill with pellagra frequently manifest complex clinical pictures which can be broken down into specific syndromes for which there are new vitamin cures. In short, pellagra is a deficiency disease caused by a lack of nicotinic acid and usually by a lack of one or more of the other fractions of the Vitamin B. complex, such as thiamin chloride, riboflavin, pyridoxin, pantothenic acid, etc. In the second place, it must be emphasized that one encounters Vitamin B sickness in other forms than pellagra. Patients may have beriberi, or ariboflavinosis, without having pellagra. Vitamin B disorders are not limited to the people of the South. These disorders comprise an important group, widespread in their distribution, and complex in their clinical manifestations. As such they are important to all of us. During the past four and a half years, I have had an opportunity to study a number of the complexities associated with Vitamin B; i.e., the patient with pellagra, the pellagra community and patients with other Vitamin B disorders.

The importance of pellagra as a disease can be judged by a study of the current vital statistics. A survey of the U. S. Vital Statistics for the year 1939 shows a total of 2419 deaths due to "pellagra (non-alcoholic causes)" or a rate of 2.9 per 100,000 resident population. Of the total deaths, 64% were females; 65% of the total deaths were in the rural population group; about two-thirds of these rural deaths were females. The range in deaths from pellagra per state varied from none to 405 with the southern states leading. Among these states Kentucky stood 10th with 81 deaths. Of these deaths, 78% occurred among the rural population. Between the years 1923 and 1940 the death rate in this State varied between 47-165 deaths per year with an average of 95 deaths per year. The incidence of pellagra morbidity cannot be obtained with complete accuracy since pellagra morbidity has not been reported in the past. It is estimated that there are 500,000 patients with pellagra in the South, with a crude incidence of 200 patients per death due to pellagra. On this assumption there are at least 16,000 patients with pellagra in the state of Kentucky. The size of the pellagra register which I have accumulated to date substantiates this assertion.

Pellagra is of further importance in that it presents an economic-social problem. We have a group of people whose manner of living has been changed in the past 20

Read before the Kentucky State Medical Association, Louisville, September 28 - October 1, 1942.

*Medical Director of the Frontier Nursing Service, Hyden, Ky. From the Department of Preventive Medicine, College of Medicine, Cincinnati, Ohio.

years. The transition has been effected in part, but they have not been able to make satisfactory dietary compensations. Hence they constitute a group of people who do not consume an adequate diet, due chiefly to the fact that they cannot afford the proper foods. Deficiency diseases are found in such groups of people.

The data that I can offer relative to this problem is limited but it is a fair cross-section of pellagra in this State. In February, 1938, Dr. Turner of the Perry County Health Department, Hazard, and I started the first pellagra clinic in Hazard. This study was started and continued with assistance and encouragement from the Department of Internal Medicine and the Department of Preventive Medicine of the University of Cincinnati. I have continued that clinic to date, attending it weekly except in the winter months when the visits vary from 2 to 6 weeks. To date I have treated 130 definite pellagrins, the majority of whom come from small urban communities. In 1940 in conjunction with Dr. Wagers of the Clay County Health Department, I established a similar clinic at Manchester. In this clinic I treated 15 definite pellagra patients, all of whom came from a rural area. A third group of pellagra patients, 7 in all, comprise those seen in my regular work as medical director of the Frontier Nursing Service. This group of patients also come from a rural area, the chief difference being that there has been an active health agency, the Frontier Nursing Service, in operation in this particular region for the past 16 years. In all I have seen 152 pellagra patients each of whom has manifested at least one clinical episode of pellagra. All of the patients in this group have been treated and observed over varying periods of time, from 2 weeks to 52 months. In addition I have observed 46 patients who had poor health with inadequate diets and, in some instances, with history of previous pellagra. These have been classified as subclinical pellagrins. I may emphasize the fact that patients are classified as definite or subclinical pellagrins only after close observation and study. It has been my policy to exclude this diagnosis until it was proved clinically and therapeutically. The majority of the patients were females, 131, most of whom were mothers. There were 21 males. There were 7 patients under 12 years of age, the youngest being 4 years of age. There were no deaths due to pellagra in this series.

The patients were from the native white mountain population of the southeastern part of the state. There was one colored patient in the entire group. From 1938 to 1941 they were representative of one of the lowest income groups in the entire state. The first of the regions studied comprises a representative mining section with innumerable small mining communities. The other two regions were rural, the poorer of which being the region in which the Frontier Nursing Service operates. The majority of the patients did not have a pellagra preventive diet because they could not afford it. Others could not utilize a diet which might have afforded protection, because of chronic illnesses from other causes, tuberculosis, syphilis, anemia, etc. I had several problem children who would not eat the proper foods. In the mining area there is a direct relation between diet and income. This in turn is a direct reflection of the undulating course of the coal industry. In the years 1938-1939 the incidence of pellagra was high: the family income from industry very low or absent. At the present time the incidence of pellagra is very low: the family income from industry very high.

The specific manifestations of pellagra vary in their multiplicity and severity. The classical oral and dermal lesions of pellagra are easily recognized. One encounters more difficulty in making an early diagnosis since he is limited for the most part to the findings obtained in the history. Such findings include a dietary history and a number of vague complaints; i.e., anorexia, malaise, indigestion, nervousness, etc. The food story is perhaps the most important, and must be obtained in terms of foods reported consumed, the cost of the foods, the family income, and the number of people dependent on the given income. Such facts are very important in themselves, but of equal importance is the opportunity afforded to observe the mental reactions of the patient. Occasionally these patients are indifferent, incoherent, or manifest frank delusions.

TABLE I

NUTRITION CLINIC—HAZARD

1938 - 1942

Descriptive Data	
Total number	152
Female	131
Male	21
Under 12 years	7
Social Data - Income	
From mines	44

Government agencies	25
Farm	27
Miscellaneous	24
Clinical Description	
Poorly nourished	58
Fairly well nourished	67
Well nourished	27
Signs of Pellagra	
Glossitis	58
Dermatitis	141
Diarrhoea	57
Psychic changes	27
Cheilosis *	38
Neuritis **	8
* Riboflavin deficiency with subclinical pellagra	16
Riboflavin deficiency without pellagra	22
**Beriberi	8

The psychic manifestations are frequently seen early in the course of the disease. In the group under discussion there were 27 patients with mental symptoms. In these individuals such symptoms appeared early in the disease or concommitant with other acute manifestations.

One of my patients demonstrates this relationship: Mrs. E. was first seen at her home since she had been reported to be ill with pellagra and was confined to her bed. She had a generous dermal reaction, a profound anemia, and marked psychic disturbances. She was insistent that she was unable to walk and was extremely annoyed by external noises. She said that when people would strike her on the skin an intense itching burning sensation would result. When I asked to inspect her tongue, she volunteered to go to the door so I could have better light. This she did unassisted. From a bed patient of one week she became ambulatory and regained most of her former activity. She is one of a household of 6, subsisting on a WPA wage of $35.00 a month. In the past four years she has had two pregnancies - one terminating in a premature stillbirth delivery, the second in a full term live birth. The first of these pregnancies was complicated by severe toxemia of pregnancy. To date she has maintained an increase in weight of 15 - 20 pounds. She has not had any frank recurrences. She has received nicotinic acid prophylactically at frequent intervals. Ill health continues in the form of hemorrhoids and a secondary anemia. The patient is at her best when the nicotinic acid therapy has been supplemented by other vitamins. The most satisfactory result followed the administration of reticulogen, feosol, and betasynplex (nicotinic acid amide 50 mg, thiamin chloride 10 mg, riboflavin 5 mg, pyridoxin 5 mg, calcium pantothenate 5 mg.).

On the other hand, I could literally induce more ill health by withholding nicotinic acid. This patient demonstrates the need for prolonged studies of the individual patient, as well as the limitations of nicotinic acid. The case also reflects the poor economy of the community. It becomes apparent that pellagra is more than a specific disease to be cured by a specific pill. There is also an associated economic sickness.

The early workers in pellagra demonstrate the favorable response of their findings (oral, dermal, gastroenteric, psychic) to nicotinic acid. However, they also reported the continuation of varying degrees of ill health in some instances. A part of this ill health was due to malignancies, tuberculosis, and other low grade foci of infection. Such a patient is not well if there is a residual neuritis or cheilosis, hence the necessity of eliminating all forms of Vitamin B sickness. Pellagra then becomes an illness which may be caused by deficiency in various other fractions of the B complex in conjunction with nicotinic acid. The relationship of thiamin chloride and riboflavin is definite. A number of the other B fractions will probably be needed to control the many sided nature of this deficiency disease.

In the pellagra group under discussion there were 14 individuals with peripheral neuritis due to thiamine chloride deficiency. The diagnosis was made usually from history — discomfort of extremities, particularly of legs and feet, and especially when in bed; hot burning extremities; and a diet sparce in thiamin chloride. Alcoholic, diabetic and vascular causes were excluded. In the physical findings, the tendon reflexes are initially increased then become less active and finally absent. There is faulty sensation, vibratory and proprioceptive. There is usually a gradual diminution of the vibratory sense. The incidence of pellagrins with neuritis was 10%. Such findings will not respond to nicotinic acid, but require the administration of thiamin chloride.

There is clinical thiamin chloride sickness, independent of nicotinic acid deficiency. This may be manifested in the form of beriberi. I had the good fortune to study an infant with beriberi. You will be interested to know that there was an initial and brilliant response to thiamin chlo-

ride therapy in massive doses, 250 mg per 24 hours.

One also encounters pellagra with riboflavin deficiency. The recent work of Dr. Sebrell and Dr. Butler has established the syndrome ariboflavinosis. Ariboflavinosis may occur as a single syndrome or it may be seen as a part of pellagra. In the group under discussion, I had 9 pellagra patients with riboflavin deficiency; 16 subclinical pellagra patients with riboflavin deficiency, and 22 patients with riboflavin deficiency without pellagra. The most obvious riboflavin lesions consist in crescentric maceration and piling up of the epithelium of the corners of the lips. In addition there is a thinning out of the mucosa of the lips with a magenta-like discoloration. There may be also a glossitis with oedema and a magenta-like discoloration of the tongue. There is an increase in the nasal comedones with an apparent increase in the activity of the sebaceous glands. There is a seborrheic-like dermatitis over the face and ears with a fine bran-like desquamation. There are varying degrees of conjunctivitis, with the patient complaining of burning, stinging sensations and of faulty vision. There is a definite and characteristic invasion of the superficial layers of the cornea by the capillary buds from the limbic plexus. These findings are typical when present but frequently one sees the lip changes alone. There are numerous other causes which make a diagnosis of ariboflavinosis fraught with difficulty at times. Some of these are syphilitic rhagades, tobacco chewing, false teeth and senility. The role of the so-called shark skin in flavin deficiency is still to be ascertained. There seems to be a thin, dry, inelastic plaque-like skin, which may come under Vitamin B group deficiency. Cheilosis may occur as an accessory to a number of other conditions, such as Addison's disease, diabetes, pregnancy, and malnutrition. The response to specific treatment is usually very prompt.

There are other fractions of the B group, the exact role of which remains to be ascertained. Of these, pyridoxin and pantothenic acid have been demonstrated to have a likely role in the well-being of the pellagrin.

The estimation of results in an ambulatory clinic such as ours can be given in terms of weight changes and recurrences.

TABLE II

NUTRITION CLINIC—HAZARD

1938 - 1942

Results of Treatment

Patients seen twelve months or more	71	
Patients seen less than twelve months	81	
Patients studied for weights	71	
Gains	41	(58%)
Losses	7	(10%)
Unchanged	23	(32%)
Pellagra recurrences and/or relapses after—		
Nicotinic acid	42	
Thiamin chloride	15	
Riboflavin	9.	

I have been able to accumulate significant weight data on 71 of my patients, who have been under observation from 12 to 52 months. The weight comparison was based on weight changes comparing the last weight with the initial weight. A gain of 5 pounds or more was considered significant and as such recorded as a gain. A loss of 5 pounds or more was considered significant and hence was recorded as a loss. The intermediate group, up to 5 pounds gain and down to 5 pounds loss in weight, were recorded as weight unchanged. On this basis there were 41 (58%) patients who gained in weight, with most of this group maintaining weight gains of more than 10 pounds. There were 7 patients who lost weight (10%). 23 patients (32%) did not have significant weight changes.

There were 53 patients with recurrences or relapses. There was a total of 58 recurrences due to nicotinic acid deficiency. These patients had from one to four recurrences, all of which occured after lapses in treatment of 6-36 months. Fifteen of these patients had thiamin chloride deficiency; 9 patients had riboflavin deficiency. These vary directly with the inability of the patient to supplement his diet with pellagra preventive foods, or with the patient's continuing to eat an unimproved fare, without the administration of the necessary prophylactic deficient Vitamin B fractions.

It is possible to induce recurrences by withholding nicotinic acid, and it is possible to avoid such recurrences by the continued administration of nicotinic acid. While there is a seasonal trend in the appearance of pellagrous lesions, they may appear at any time throughout the year. They occur after periods of living on very poor diets. The recurrences observed were usually very mild. This is likely due to the clinic consciousness of the group of patients. The problem of the pellagrin with recurrences and the problem of the pellagra community are both formidable and must not be minimized by the amazing progress made with the individual patient

in the past five years.

The prevention of pellagra is complex. Thus far we know of the respective roles of nicotinic acid, thiamin chloride, and riboflavin. Among the other fractions which may prove of value are pyridoxin, pantothenic acid, biotin, inositol, inosite etc. Pellagra can be cured and prevented by a diet containing adequate amounts of the respective deficient substances. Due to the varied sources of these foods it follows that it will be difficult to reduce the preventive therapy to concentrated pills. The foods containing the necessary corrective substances are so vital from the standpoint of general nutrition that it is not well to omit the food in favor of the deficient factor in pill form. All workers agree that prevention by dietary measures is the most effective. In recognition of this fact it then becomes necessary to think of causes to be corrected such as low income associated with poor health. Hence pellagra looms up as perhaps the first major medical-social-economic disease. Ultimate prevention may be accomplished when bolted meal, fat pork, and gravy are replaced by home-ground meal, beef, and milk. At the present time the work on this problem is progressing chiefly by food studies. There is need for more community survey. There is reason to believe that economic correction will be more permanent than making the adjustment solely on a pill basis.

I have intimated that one of the reasons for dietary deficiencies has to do with the food habits. This is true of the problem child. It is also true of the mountain mother, who usually eats after the others have eaten. I think this explains why more rural mothers than fathers have pellagra. The farmer and his family in the hills are usually in a position to have a basic preventive diet, because most of the families have a scrub cow and a few hens. When the farmer turns miner, as is the case in the coal community, he foregoes the cow and the hens. As a result when the coal business is poor, he has a deficient diet because he does not have his own supply of milk and eggs.

The economy of the community is a second reason. In the rural areas in this study the incomes are persistently low. Hence one finds sporadic cases of pellagra. In times of crop failure or droughts, local epidemics have been known to occur. In the urban or coal mining area there is a direct relation between the operation of the mines and the incidence of pellagra. About three years ago, coal operations were at the new low in this area, and the incidence of pellagra was high. The reverse of this is true at the present time since coal mining is a vital war industry.

The absence of education in its various phases is glaring. If a mother has had ten babies and pellagra, she might have been free of pellagra if she had had only five babies. Family income must be utilized to better advantage to compensate for the weeks of reduced or absent income. There must be more economy in the buying and in the preparation of foods. People must be better informed about the health sparing values of foods. Such work must be carried out in a personal way, and with close supervision. The emphasis placed on food by the staff of the Frontier Nursing Service has been effective in the prevention of pellagra in their rural area.

The ramifications of Vitamin B. deficiencies are more intense than this report indicated. I have limited myself to the field of my own observations. The relation of Vitamin B deficiencies to the war program is poignant. I think the impetus given to the study of these problems has been timely. It focuses attention on the facts known to date, and accelerates additional studies. Fortunately, our plans include areas in other countries where food situations are already acute as well as procedures for our own post war economy.

(Bibliography furnished upon request.)

Therapy of Gastric Hemorrhage.—Van Meeteren calls attention to Meulengracht's method, which provides generous amounts of food (as much as the patient desires) from the first day of the treatment. Meulengracht's method, altho' revolutionary, is not entirely new, Lenhartz having advanced a similar one in 1903. The only concession which Meulengracht makes to the hemorrhage is that he gives all foods in pureed form. There are practically no dietetic restrictions, except that foods which can be pureed are given the preference. In addition to the pureed diet the patients are given three times daily a teaspoon of a prescription containing 15 Gm. each of sodium bicarbonate and magnesium subcarbonate, also 2 Gm. of hyoscyamus extract. Patients who have lost much blood are given a blood transfusion. Van Meeteren employed Meulengracht's method in 30 cases. The only medicament he gave in addition was vitamin A (22,000 international units three times daily). On the basis of his observation he recommends Meulengracht's diet. The method excludes the indication for "early operation" in gastric hemorrhage.

BOOK REVIEWS

ATONOMIC REGULATIONS: By Ernest Gellhorn, Ph. D., M. D., Prof. of Physiology, College of Medicine, University of Illinois. 371 pages illustrated. Inter-Science Publishers, Inc., New York, N. Y., 1943. Price $5.50.

This is a reference book of great importance, listing 1,100 references at its end with which the author copiously illustrates his data throughout the 308 pages of concentrated material. The book is divided into five parts, each one almost a book in itself:

(1) General autonomic and physiological foundations. (22) Respiratory and circulatory systems. (3) Autonomic-endocrine integration. (4) Autonomic-somatic integration. (5) Results and application, clinical and otherwise.

The book is well organized for teaching purposes.

Unless one has kept up on such matters, he will find himself reading and re-reading each section, not that it is too difficult to understand, but the material is so concentrated. He often puts ten years of someone's study into one sentence. All literary style is sacrificed for the boiled down facts, typically American and German style as distinct from British writings.

Dr. Gellhorn has completed a monumental work to which his own researches have made notable contributions. Fifty-five of the 1,100 references are his own. His last chapter of the recent researches in the physiological pathology of schizophrenia are thoroughly up to date.

Dr. Gellhorn falls into the correct phraseology of the times by calling attention in his excellent introduction to "man as a whole"—meaning for him as a physiologist man as an integrated biological whole—not man as a socio-physcho-biological whole. But being an eminent physiologist, he can be forgiven for this. Some day he may yet write on brain anoxemia and its relation to affect-hunger of the rejected child. Who knows!

Shafford Ackerly, M.D.

THE SIGHT SAVER: By C. J. Gerhig. The Harvest House Publishers, New York. Price $2.00.

Every year millions of dollars are spent on useless or dangerous eyewashes, and on a host of widely-advertised patient eye products. These sales represent not only a cost in money but all too often a loss of sight as well. This work attempts to combat the ignorance which enables such quackery and fraud to exist. It covers the subject of sight conservation from every angle, without invading the province of the family physician or the eye specialist. Virtually everything from A to Z is here, and the language is as simple and understandable as the information is conservative and accurate.

CLINICAL LABORATORY DIAGNOSIS:—By Samuel A. Levinson, M.S., M.D.. Director of Laboratories and Pathologist, Research and Educational Hospitals, Chicago, Illinois; Professor of Pathology and Assistant Professor of Medicine, University of Illinois College of Medicine and Robert P. MacFate, Ch.E., M.S., Ph.D., Assistant Director of Laboratories, Research and Educational Hospitals, Chicago, Illinois; Assistant Professor of Pathology, University of Illinois College of Medicine. Second edition, thoroughly revised. Octavo, 980 pages, illustrated with 156 engravings and 15 plates, 7 in color. Cloth, $10.00, net. Lea and Febriger, Publishers, Philadelphia.

This highly successful work aims to give the student, practicing physician and technician a practical review of clinical laboratory diagnosis sufficient to meet all of their general needs. In its new second edition, this material has been brought fully up to date by the addition of over a hundred pages of text. The number of engravings has been increased and two new colored plates have been included.

The chemical methods have been detailed in as simple terms as possible and now include the use of the photometer and the employment of ascorbic acid, sulfanilamide and its derivatives, thiocyanates, phosphatase, amylase and others which have gained increased importance in the past few years. The chapter on hematology has been enlarged and discussions on the bone marrow findings, Rh factor, prothrombin and blood volume have been added. The latest approved changes in the Kolmer Complement Fixation test, the Kahn test and others have been included. To the chapter on bacteriology has been added complete detailed procedures for initial isolation and final identification of all the common bacteria. Bergey's latest nomenclature and classification have been followed throughout.

This work offers a complete discussion of laboratory procedures for diagnostic purposes and a dependable laboratory guide for daily reference. Technicians and general clinicians who do their own laboratory work will find this book of great practical assistance. It is unique in its comprehensiveness. It includes brief statements concerning anatomy, physiology and clinical symptoms, the procedures applicable to legal medicine and toxicology and material helpful in solving the problems of pediatrics, skin tests and histologic technic. Throughout the work there is a consistent endeavor to correlate laboratory findings with clinical symptomatology.

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ANNUAL MEETING LOUISVILLE

OCTOBER 4-6, 1943

COUNTY SOCIETY REPORTS

Henry: The meeting was called to order by the president, G. E. McMunn at 7:30 p. m., on March 11, 1943 at the Castle Hotel in New Castle. Dr. Otto Cubbage asked the Blessing, and dinner was served. Members present were as follows: G. E. McMunn, W. E. Carter, Maurice Bell, W. W. Leslie, A. P. Dowden, J. C. Hartman, O. P. Chapman, F. D. Hancock, J. L. Karnes, Otto Cubbage, R. J. Skidmore, Owen Carroll, Secretary.

Guests of the Society present were as follows: Dr. Auryne Bell, Louisville, Mrs. G. B. Claxton, Lawrenceburg, Mrs. G. E. McMunn, Mrs. W. F. Carter, Miss Dorothy Warner, Mrs. Maurice Bell, Mrs. Otto Cubbage, Mr. and Mrs. C. E. McNeal, Mrs. A. P. Dowden, and Mrs. J. C. Hartman. Owen Carroll.

At the conclusion of dinner, the President again called the meeting to order. The minutes of the previous meeting were read by the Secretary and approved as read. The Secretary read an invitation extended to this Society by the Jefferson County Medical Society for a dinner meeting to be held at the Brown Hotel, Louisville, March 22, 1943, plates $2.00.

The Secretary also read a letter from the Secretary of the State Medical Association in regard to the forthcoming Annual Meeting of that Association to be held at the Brown Hotel, Louisville, October 4 and 5, of this year, and in which letter the State Secretary asked for an expression from this Society on several questions as to the length of the meeting, the time which the House of Delegates should hold its sessions, and delegates from this Society. A short discussion of these topics followed and it was noted that Dr. Bell is the Delegate, Dr. Chapman, alternate.

The Secretary presented the bills of the F. S. H. A. for signatures and approval.

The President asked Mr. McNeal, agent of the F.S.H.A. to take over the meeting for discussion of the Society's participation in the Group Medical plan of the F. S. H. A. Mr. McNeal spoke briefly: he said that he felt that the plan had been weighed and found wanting but that it was his hope that the doctors of the County would look a little further into the matter, that the Group Medical plan had paid fully 90 per cent of its bills, and that it meant that the doctors would get something for their services to its members, whereas in all probability, without the plan, they would get little or nothing. He stated that he realized the plan was far from perfect, but that from it something worthwhile would develop, and that he would like for the doctors to set aside the decision of the previous meeting to withdraw from participation in the plan, and give it another trial.

Free discussion ensued, and Mr McNeal's of-

fice was requested to give each member of the F. S. H. A. a card showing that he was such a member, which he readily agreed to do. This request was put in the form of a motion by Dr. Carroll, seconded by Dr. Leslie, and unanimously passed. It was noted that membership in the F. S. H. A. had decreased somewhat.

Motion was made by Dr. Leslie, seconded by Dr. Hancock, and unanimously passed that the Society would continue participation in the Group Medical Plan.

The Secretary asked that all doctors get their bills in promptly for the Group Medical.

The President turned the meeting over to Dr. Maurice Bell, who was in charge of the program. He introduced his son, Dr. Auryne Bell, Louisville, who read a paper entitled "Treatment of the Common Head Cold." His paper was received with great enthusiasm, it being a subject all physicians are interested in.

All members entered into the discussion of the paper and many questions were asked. It was noted that Dr. Owen Carroll, Secretary, would be host for the April meeting, and also in charge of the program. There being no further business, the meeting adjourned, to meet the second Thursday in April.

Owen Carroll, Secretary.

Henry: The meeting was called to order by the President, Dr. McMunn at 7:30 P. M., April 8, 1943 at the Castle Hotel, New Castle. Dr. Owen Carroll was host and in charge of the program. Wives of the members were invited. Dr. Bell asked the Blessing, and dinner was served.

Members present were as follows: G. E. McMunn, A. P. Dowden, O. P. Goodwin, J. C. Hartman, O. P. Chapman, Maurice Bell, Otto Cubbage, Owen Carroll, W. W. Leslie, E. W. Wyman.

Guests present were as follows: Mrs. McMunn, Mrs. Dowden, Mrs. Hartman. Mrs. Leslie, Mrs. Cubbage, Mrs. Bell, Mrs. Carroll.

The Minutes of the previous meeting were read and approved. Discussion of a date for the County examination of crippled children followed, and the fourth Wednesday in May was selected for such examinations.

Dr. Carroll made a short introduction of the guest speaker, Dr. Winston Rutledge, Louisville, who spoke on "Diseases of the Skin" showing the most interesting slides in color to illustrate his remarks. All present showed great interest in Dr. Rutledge's discussion of his subject, which is also his specialty, and all physicians present entered into the discussion which followed.

There being no further business, the meeting adjourned, it being noted that the next meeting would be held by Dr. W. F. Carter.

Owen Carroll, Secretary.

Jefferson: The 862nd stated meeting of the Jefferson County Medical Society was held Monday evening, April 5, with 60 members and guests present. The President called the meeting to order at 8:05 P. M.

The Secretary read the minutes of the two previous meetings and they were accepted as read.

The Secretary read a letter from Mrs. John W. Moore, Secretary of the American Red Cross Volunteer Nurses' Aide Division, inquiring whether or not any member of the Society would be willing to have the Red Cross refer applicants for the Nurses Aide Group for physical examinations. This applies to those applicants from out of town or those who are newcomers in the city. It was decided to post the letter on the bulletin board and let each member be guided by his own feelings.

E. L. Heflin presented a motion to annul Chapter 17, Sections 1-7 of the By-laws dealing with the Credit Rating Bureau. Action will be deferred until the first meeting of the following month, i.e. May.

H. M. Weeter, Chairman of the Program Committee, announced that Percy S. Pelouze will be the guest speaker at the first meeting in May and will talk on the "Treatment of Gonorrhea."

Virgil Simpson of the Medical Economics Committee read a letter from Hugh R. Leavell concerning the problem of financial eligibility for admission to Child Health Conferences of the Health Department, presented the findings of the Committee and its recommendations; namely, 1. That $400.00 and below per capita per year in a family be considered as the financial yardstick for eligibility for children of such a family to be admitted to the Child Health Conference; 2. That this recommendation is intended to obtain only through the war period; 3. That this recommendation is not intended to serve as a comparative yardstick in determining eligibility for admission to therapeutic clinics maintained by the Louisville and Jefferson County Health Department.

Motion was made, seconded and passed that the recommendations be adopted.

New members elected are: Samuel S. Clark, Harry R. Golde, Mary Miller Furnish, Wm. F. Furnish and H. Paul Mahin. Reinstated was Dr. Roy K. Diamond.

Benjamin Brock read a letter from the Tuberculosis Reference Committee to President Smock following a meeting on March 7 of the Committee at Waverly Hills Tuberculosis Dispensary at which the following recommendations were formulated: 1. That all school teachers in the city and county be X-rayed or fluoroscoped every two years; 2. that all applicants for the position of school teacher be

required to have an X-ray of the lungs before given a position; 3. that the Jefferson County Medical Society go on record as approving these resolutions; 4. that the Jefferson County Medical Society, Executive Committee, present these recommendations to the proper school authorities.

The President stated if there were no objections the recommendations will be referred to Dr. Heflin and the Executive Committee.

Scientific Program: 8:50 P. M.

Case Report: "Multiple Vitamin Deficiencies." Austin Bloch, discussed by P. K. Knoefel and Virgil E. Simpson. "Vitamin C. Deficiency." (Lantern Slides). Ben H. Hollis, discussed by Doctors Margaret A. Limper (from the standpoint of the pediatrician), Victor P. Dale (from the standpoint of the internist), Albert E. Leggett (from the standpoint of the oculist). Richard T. Hudson showed the X-rays of the case reported. Misch Casper and Robert Hendon contributed the general discussion and Dr. Hollis closed the discussion. Meeting adjourned at 9:55 P. M.

Herman Mahaffey, Secretary

Jefferson: The 863rd stated meeting of the Jefferson County Medical Society was held Monday evening, April 19, with 43 members present. E. L. Heflin, who presided, called the meeting to order at 8:05 P. M.

The Secretary read a letter from Mr. Richard Gifford of the Salvation Army concerning Boys' Club Week, April 24 to May 1. The Louisville Boys' Club expects to conduct a health clinic on April 30 at 2509 Portland Avenue and wants to have a complete check-up of the 300 boys and will do what they can to correct any defects found. The Salvation Army asks the donation of medical services for this check-up.

Motion was duly made, seconded and passed to refer the matter to the Executive Committee.

M. J. Henry, of the Executive Committee, spoke in favor of the recommendations made by the Tuberculosis Reference Committee and made a motion that the Society approve the recommendations and that a notice of this action be sent to the Board of Education. Motion seconded.

E. L. Shiflett believes that fluoroscopy is inadequate to detect early minimal tuberculosis and would therefore be a hazard. He recommended that the recommendation should read: "That all school teachers in the City and County be x-rayed at least every two years, either at the Tuberculosis Dispensary, or by their private physicians if preferred by the teachers;" in other words, i.e., omit the words "or fluoroscoped"..

With further discussion by Doctors M. J. Henry, H. M. Weeter, E. L. Heflin and J. G. Sherrill, motion was made, seconded and passed to refer the matter again to the Tuberculosis Reference Committee and the Executive Committee for joint action.

Scientific Program: 8:30 P. M.

"Colloidal Gold Reaction as a Test of Hepatic Parenchymal Disturbances." Capt. Herbert L. Clay, M. C., U. S. Army. Read by George W. Pedigo, M. D.

Discussed by Max Garon, Austin Bloch and George W. Pedigo.

"Syphilis from the Standpoint of the Serologist." W. H. Allen M. D.

Discussed by Oscar Bloch, Jr., Winston Rutledge, J. G. Sherrill, C. S. Eddleman, E. L. Heflin and H. M. Weeter, with closing remarks by Dr. Allen.

The meeting adjourned at 9:50 P. M.

Herman Mahaffey, Secretary.

Jefferson: The 864th stated meeting of the Jefferson County Medical Society was held Monday evening, May 3, with 61 members and about 24 guests present.

The President called the meeting to order at 8:10 P. M.

The Secretary read the minutes of the previous meeting and they were approved as read.

The Secretary read a letter from Ida Belle Gresham, a trained masseuse located in the Brown Building who wishes to cooperate with the medical profession in the treatment of patients.

The Secretary read a letter from the Fort Knox Emergency Relief Section concerning the problem of securing adequate medical attention for non-resident dependents of Army personnel, and expressing the hope that some workable solution will be evolved.

Motion was made, seconded and passed that this be referred to the Medical Economics Committee for their consideration and report to the Society.

Richard T. Hudson, Chairman of the Credit and Rating Section of the Professional Service Committee, read a motion that the committee go on record as being in favor of disbanding this section. This was seconded and passed.

Virgil Simpson of the Medical Economics Committee read a letter referred to it from the Secretary of the San Diego Medical Society asking how medical services were rendered here in defense plants, the information to be used at the California Medical Association meeting by that Society three days after the letter was received. Of approximately 17 defense plants, 11 have made arrangements with local physicians on contract to take care of

plant incurred injuries or illness; 5 have all-time men employed; 1 plant has commissioned officers looking after the work. This report was wired to the Secretary of the San Diego Society.

The President then asked the Secretary to read the motion, as made a month ago, concerning the annulment of Chapter 17, Sections 1-7 of the By-laws.

It was moved and seconded that the recommendations be concurred in.

E. L. Heflin of the Executive Committee cited facts and figures supporting the contention that expenses must be curtailed on account of decreased income and hoped the amendment to the By-laws would be passed.

Virgil Simpson spoke in favor of keeping the Credit and Rating Bureau, more especially on account of the collection agency handling the accounts of men now in the services. He felt that to discontinue this now would be unfair to those men.

To a question by Dr. Gordon Buttorff, the President replied that the Credit and Rating Bureau and collection agency were not the same units.

After further discussion by Doctors Heflin, Simpson, C. L. Nichols, G. G. Altman and O. O. Miller, the question was put to a standing vote and passed (42-2).

O. O. Miller than made a motion that the Medical Economics Committee be empowered to contact the Credit and Rating Bureau to work out some means of functioning as an independent bureau and carrying the name of the Jefferson County Medical Credit and Rating Bureau. Motion seconded, put to a standing vote and passed (33-9).

The President introduced C. P. Loranz, Secretary-Manager of the Southern Medical Association, who was one of the guests present.

New members elected are: Doctors Theodore H. Hollinshead, Homer E. Isley, J. Harold Meyer. Roy Moore, Sr., Carl A. Whitaker and J. Sankey Williams.

Scientific Program 9:10 P. M.

Gradie Rowntree introduced the guest speaker, Dr. Percy S. Pelouze, Assistant Professor of Urology at the University of Pennsylvania Medical School and Consultant to the U. S. Public Health Service, who spoke on the subject, "The Treatment of Gonorrhea" and illustrated his talk with lantern slides.

At the conclusion of his address, he was given a rising vote of thanks.

Adjourned: 10:10 P. M.

Herman Mahaffey, Secretary.

Shelby: The regular monthly meeting of the Shelby County Medical Society was held at the Colonial Inn, Shelbyville, with H. H. Richeson of Louisville as host. The following members and gues s being present:

Drs. Carroll, Dowden, Bland, Leslie, Morris, Blaydes, Weakley, McMurry, Hayes, Skaggs, Furnish, Richeson, Beard, Hughes, Sleadd, McMunn, Bell, Alexander, Nash, Risk and guests, Dr. Crume of Louisville and Dr. Hankins of Finchville.

After a very delightful chicken dinner the meeting was called to order by President Bell. The minutes of the previous meeting were read and approved.

The Secretary announced he would be host at the next meeting on May 20th when Dr. Pelouze of Philadelphia would give a paper on Gonorrhea. Dr. Carroll made a motion, seconded by Dr. Alexander that the physicians of the surrounding counties be invited at this meeting and an assessment be made of the members present to pay for the dinner of the invited guests. The motion was carried.

At this time the meeting was turned over to the host of the evening, Dr. Richeson and he introduced the speaker, Dr. Frank Simion of Louisville. Dr. Simion gave a very interesting talk on Allergy, symptom and treatment. The paper was freely discussed.

A motion was made to adjourn.

C. C. Risk, Secretary.

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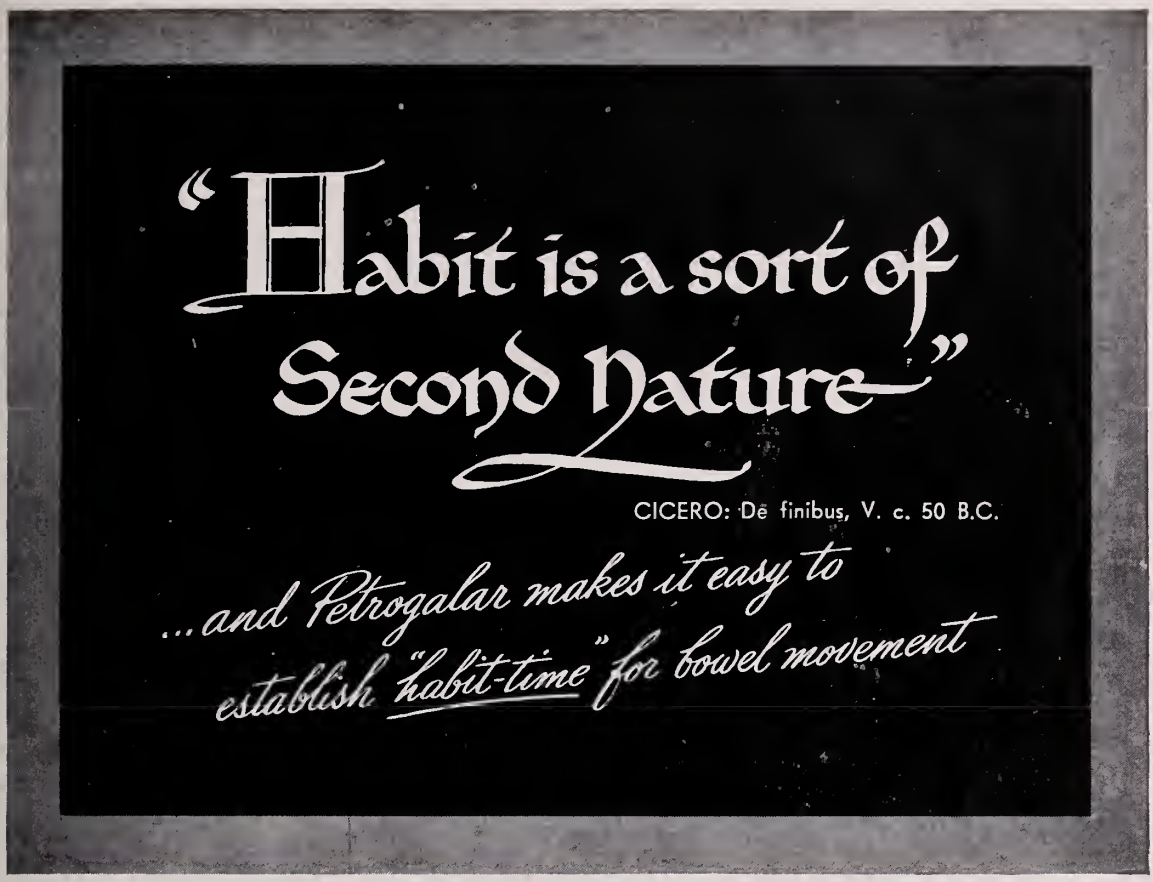
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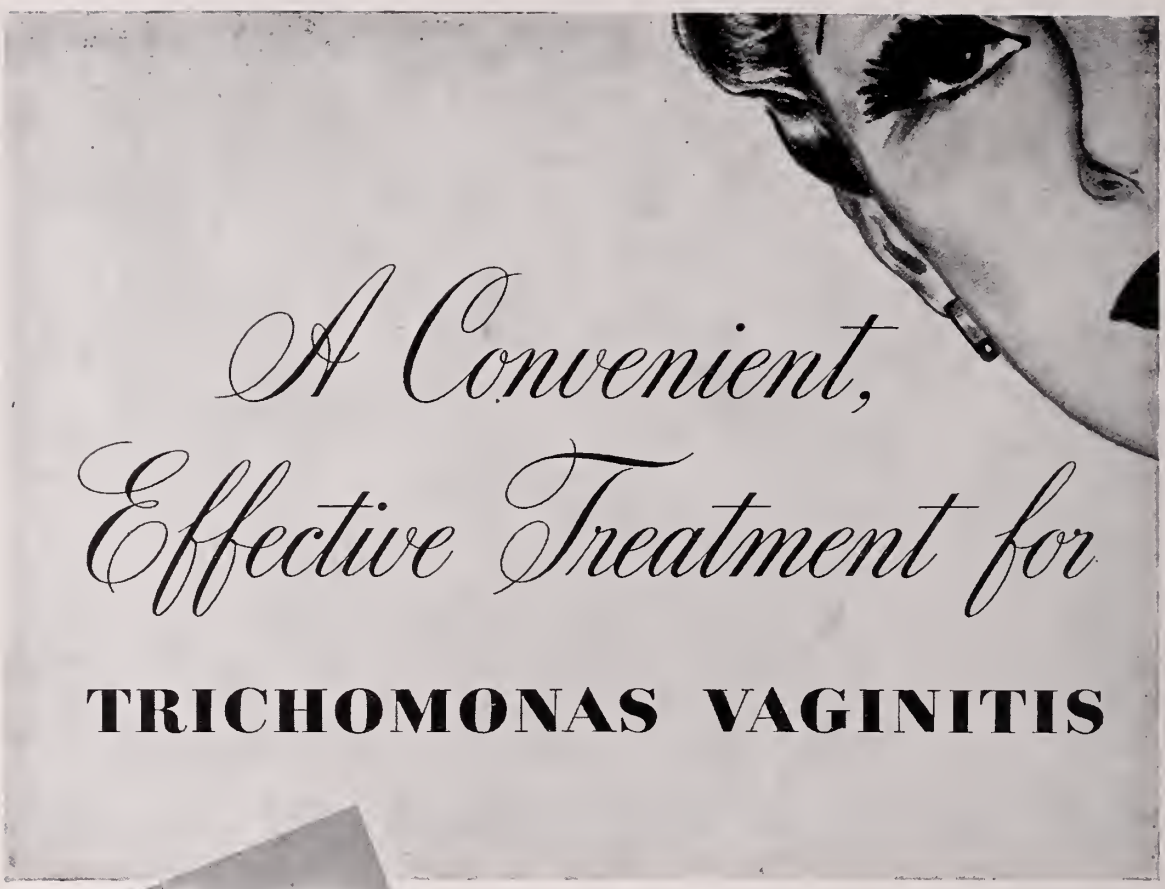
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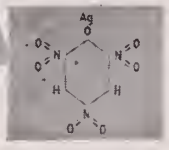
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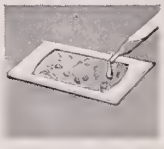
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CALENDAR OF COUNTY SOCIETY MEETINGS

COUNTY	SECRETARY	RESIDENCE	DATE
Adair	W. Todd Jefferies	Columbia	July 7
Allen	A. O. Miller	Scottsville	July 28
Anderson	J. B. Lyen	Lawrenceburg	July 5
Ballard	F. H. Russell	Wickliffe	July 13
Barren	C. R. Markwood	Glasgow	July 21
Bath	H. S. Gilmore	Owingsville	July 12
Bell	Edward S. Wilson	Pineville	July 9
Boone	R. E. Ryle	Walton	July 21
Bourbon	George M. Jewell	Paris	July 15
Boyd	R. G. Culley	Ashland	July 6
Boyle	P. C. Sanders	Danville	July 20
Bracken-Pendleton	W. A. McKenney	Falmouth	July 22
Breathitt	M. E. Hoge	Jackson	July 20
Breckinridge	J. E. Kincheloe	Hardinsburg	July 8
Bullitt	George B. Hill	Mt. Washington	
Butler	D. G. Miller, Jr.	Morgantown	July 7
Caldwell	W. L. Cash	Princeton	July 6
Calloway	J. A. Outland	Murray	
Campbell-Kenton	Robert L. Biltz	Newport	July 1
Carlisle	E. E. Smith	Bardwell	July 6
Carroll	H. Carl Boylen	Carrollton	July 13
Carter	Don E. Wilder	Grayson	July 13
Casey	Wm. J. Sweeney	Liberty	July 22
Christian	H. B. Stone	Hopkinsville	July 20
Clark	W. Carl Grant	Winchester	July 16
Clay	L. H. Wagers	Manchester	
Clinton	S. F. Stephenson	Albany	July 17
Crittenden	C. G. Moreland	Marion	July 12
Cumberland	W. F. Owsley	Burkesville	July 7
Daviess	W. H. Parker	Owensboro	July 13 & 27
Estill	Virginia Wallace	Irvine	July 14
Fayette	Charles D. Cawood	Lexington	July 13
Fleming	Roy Orsburn	Flemingsburg	July 14
Floyd	Robert Sirkle	Weeksbury	July 28
Franklin	E. K. Martin	Frankfort	July 1
Fulton	John G. Samuels	Hickman	July 14
Gallatin	J. M. Stallard	Sparta	July 15
Garrard	J. E. Edwards	Lancaster	July 15
Grant	Wallace Byrd	Owenton	July 21
Graves	H. H. Hunt	Mayfield	July 6
Grayson	E. B. Deweese	Caneyville	
Green	S. J. Simmons	Greensburg	July 5
Greenup	Virgil Skaggs	Russell	July 9
Hancock	F. M. Griffin	Hawesville	July 5
Hardin	D. E. McClure	Elizabethtown	July 8
Harlan	W. R. Parks	Harlan	July 17
Harrison	W. B. Moore	Cynthiana	July 5
Hart	Vinson Coeroa	Munfordville	July 6
Henderson	Walter L. O'Nan	Henderson	July 12 & 26
Henry	Owen Carroll	New Castle	July 8
Hickman	H. E. Tilsworth	Clinton	July 1
Hopkins	Wm. H. Garnier	Madisonville	July 8
Jefferson	Herman Mahaffey	Louisville	July 5 & 19
Jessamine	J. A. VanArsdall	Nicholasville	July 22
Johnson	Paul B. Hall, Act. Sec.	Paintsville	July 26
Knox	T. R. Davies	Barbourville	July 15
Laurel	Oscar D. Brock	London	July 14
Lawrence	L. S. Hayes	Louisa	July 19
Lee	A. B. Hoskins	Beattyville	July 10
Letcher	Bert C. Bach	Whitesburg	July 27
Lewis	Elwood Esham	Vanceburg	July 19
Lincoln	Lewis J. Jones	Hustonville	July 16
Livingston	T. L. Radcliffe	Smithland	
Logan	E. M. Thompson	Russellville	
Lyon	H. H. Woodson	Eddyville	July 6
McCracken	Leon Higdon	Paducah	July 28
McCreary	R. M. Smith	Stearns	July 5
McLean	F. L. Johnson	Livermore	July 8
Madison	Max E. Blue	Richmond	July 15
Magoffin	Lloyd M. Hall	Salyersville	
Marion	Nelson D. Widmer	Lebanon	July 27
Marshall	S. L. Henson	Benton	July 21

COUNTY	SECRETARY	RESIDENCE	DATE
Mason	C. W. Christine	Maysville	July 14
Meade	S. H. Stith	Brandenburg	July 22
Menifee	E. T. Riley	Frenchburg	
Mercer	J. Tum Price	Harrodsburg	July 13
Metcalfe	E. S. Dunham	Edmonton	
Munroe	Geo. E. Bushong	Tumpkinsville	
Montgomery	Juhn M. Prewitt	Mt. Sterling	July 13
Muhlenberg	Claude Wilson	Greenville	July 13
Nelson	Keith Crume	Bardstown	
Nicholas	T. P. Scott	Carlisle	July 19
Ohio	Oscar Allen	McHenry	July 7
Owen	K. S. McBee	Owenton	July 1
Owsley	W. H. Gibson	Booneville	July 5
Perry	Lewis C. Culeman	Hazard	July 12
Pike	S. B. Casebolt	Pikeville	July 1
Powell	I. W. Johnson	Stanton	July 5
Pulaski	Robert G. Richardson	Somerset	July 8
Robertson	Logan T. Lanham	Mt. Olivet	
Rockcastle	Robert G. Webb	Livingston	July 2
Rowan	I. M. Garred	Morehead	July 12
Russell	J. R. Popplewell	Jamestown	July 12
Scott	A. F. Smith	Georgetown	July 1
Shelby	C. C. Risk	Shelbyville	July 15
Simpson	N. C. Witt	Franklin	July 13
Spencer	M. H. Skaggs	Taylorsville	
Taylor	L. S. Hall	Campbellsville	July 8
Todd	B. E. Boone, Jr.	Elkton	July 7
Trigg	Elias Futrell	Cadiz	July 13
Union	E. Bruce Underwood	Morganfield	July 6
Warren-Edmonson	John H. Blackburn	Bowling Green	July 14
Washington	J. H. Hopper	Willisburg	July 21
Wayne	Frank L. Duncan	Monticello	
Webster	C. M. Smith	Dixon	July 30
Whitley	C. A. Moss	Williamsburg	July 1
Wolfe	John L. Cox	Campton	July 5
Woodford	George H. Gregory	Versailles	July 1

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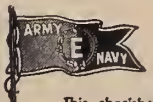
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children laugh and grow up in freedom to reach high places in government or industry according to their merit.

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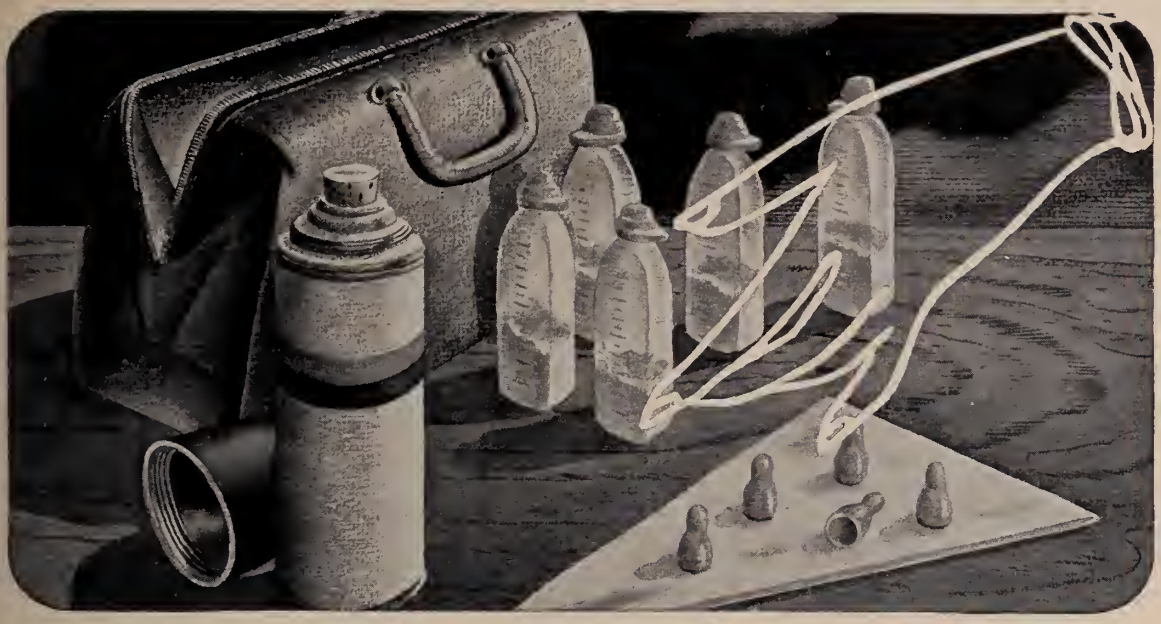
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PRESIDENT
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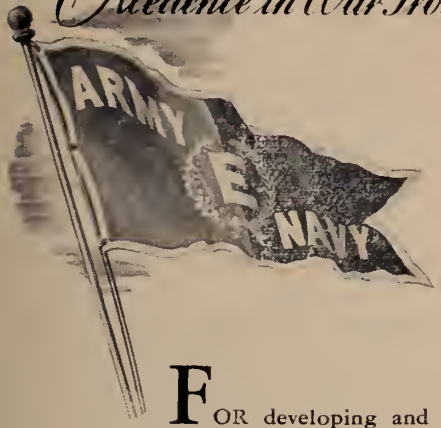
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Founder

Will Camp, M. D.
Medical Director

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KENTUCKY MEDICAL JOURNAL

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

VOL. 41, No. 7 BOWLING GREEN, KY. JULY, 1943

THE ANNUAL MEETING

The Annual Meeting of the State Medical Association is scheduled to be held at the Brown Hotel, Louisville, October 4, 5 and 6. Monday, October 4 will be devoted to the House of Delegates. On Tuesday and Wednesday, the 5th and 6th, there will be a combined war, postwar and postgraduate program. This program is being developed by a special faculty which will be provided by the American Medical Association, the American College of Surgeons and the American College of Physicians. The physicians in the armed forces stationed in Kentucky and Southern Indiana will be the special guests of the Association.

It is very important for the members to write in for reservations as soon as possible. We must remember that the hotels are crowded and those who do not make reservations in advance will not get rooms. We have agreed with the hotel that from two to four will be in each room and we hope our members can arrange for congenial parties.

The Scientific Exhibits for this year will be developed by a committee of which Dr. Harry M. Weeter, Louisville, is Chairman, and Drs. George W. White, Henderson, and Charles W. Kavanaugh, Lexington, are members. They promise to be more than ordinarily interesting and instructive.

It is of interest that a larger proportion of our members who are serving with the armed forces have paid their dues than of those who have remained at home. If you have not sent your dues to your County Secretary, please do so while you are reading this editorial

SOUTHERN MEDICAL ASSOCIATION

The Council of the Southern Medical Association held a meeting in New Orleans on May 28th and decided to hold its Annual Meeting in Cincinnati, Ohio, November 16, 17 and 18. It was decided that war had not lessened the need for a meeting of this great scientific body, representing the medical profession of the South. It was also determined that the three day meeting would be equally divided between civilian and military medicine.

The invitation to meet in Cincinnati was extended by the Campbell-Kenton County Medical Society, the Cincinnati Academy of Medicine and the Kentucky State Medical Association.

This promises to be a historic session and the medical profession of Kentucky would be very happy to assist in making it a success because we consider Cincinnati one of the most promising suburbs of Covington and Newport. As a matter of fact, we have a historic right to hold a meeting in Cincinnati because it was our ancestors who made Ohio a part of the Dominion of Virginia, which later ceded it to the United States, and we are merely going back to part of our old home when we hold a session in the historic Queen City.

There is no finer medical profession than that of Cincinnati and we know everyone who attends these sessions will carry back happy memories of the hospitality of its medical profession.

DOCTOR HENDERSON AGAIN HONORED



Dr. Elmer L. Henderson has been appointed as a special consultant to the Secretary of War in regard to surgical problems vital to the medical maintenance of the Army Air Forces at the request of Brig. Gen. David Grant, Chief Air Surgeon of the United States.

Dr. Henderson will be called to Washington at intervals for conferences under the jurisdiction of the Surgeon General of the Army.

Dr. Henderson is a Past President of

the Kentucky State Medical Association, of the Jefferson County Medical Society, and is President of the Southern Surgical Congress, and a member of the Board of Trustees of the American Medical Association. He was a Major in the Medical Corps in France during World War I.

We congratulate Dr. Henderson on this additional recognition as an indefatigable and wise counsellor. The Medical Section of the Army Air Forces has probably made more progress than any special branch in our armed forces during the war. General Grant is a very great administrator and he is organizing his staff in such a way as to do everything possible to improve the service which will be rendered by his section during the war and by the physicians who compose it after the war.

WAR PLANNING FOR TUBERCULOSIS CONTROL

The above is the title of an address by Colonel Charles M. Hendricks of the Medical Corps of the Army, Chairman of the Council on Military Affairs and Public Health of the American College of Chest Physicians, published recently in its Journal, Diseases of the Chest.

Dr. Hendricks, a distinguished member of the medical profession of Texas, lives at El Paso and he reviews the experience following other wars with tuberculosis. He proposes a plan for a United States Military Tuberculosis Commission. We are reproducing this proposed plan because it is so pertinent to just what we should do in Kentucky. In fact, it is almost exactly what we are doing.

Following the splendid survey on the subject by our Committee on Medical Economics, under the Chairmanship of Dr. Virgil E. Simpson, Dr. John Floyd, who has also been a Lieutenant Colonel in the Medical Reserve Corps of the Army, has been doing just this type of investigation and organization. This plan was brought to the attention of Governor Johnson and he has approved the addition to the State Tuberculosis Hospital of 250 beds, which will make it a 400 bed hospital. Under the supervision of Dr. Paul A. Turner, himself a distinguished member of the American College of Chest Physicians, this splendid institution will be the center from which our work will be organized.

Dr. Hendrick's plan is as follows:

Organization

1) The commission to consist of three or more medical officers who are highly qualified chest specialists known to have vision, imagination, and executive ability.

2) The senior member of the commission to act as director.

Purposes

1) To assemble and classify all obtainable information pertinent to the protection of our own troops, and the study and control of tuberculosis in each country most likely to be occupied by units of the U. S. Army.

2) To select for the approval and appointment by the Surgeon General, medical personnel to constitute "Tuberculosis Control Teams."

3) To administer the training of control teams utilizing all assembled information in order that the Control teams may accomplish their mission in each specific country when occupied.

Type of Information to be Assembled

1) The comprehensive study of the geography of each country.

2) Population of each country, city and subdivision thereof.

3) A study of the public health laws of each country which were in force at the time of enemy occupation.

4) A study of all medical organizations and anti-tuberculosis societies in each country.

5) To attempt to secure the rosters of each of the above organizations.

6) To secure the number and type of hospitals and sanatoria in each country, city and subdivision.

7) The amount of x-ray equipment available in each city and subdivision of each country.

8) The availability of x-ray films, developing solutions, and information concerning the manufacture thereof.

9) The names of the leading chest specialists in each city and subdivision of each country.

10) Information concerning the death rate of cities and subdivisions of each country at the time of enemy occupation.

11) The approximate death rate in each country at present.

12) Information concerning educational institutions, schools, colleges, public and private.

13) Information concerning educational leaders in each city and subdivision of each country.

14) To assemble and classify all possible information concerning the above-mentioned points for each enemy country.

Personnel of Control Teams

1) The amount of personnel required for each team would be determined by the size and population of the country concerned.

2) The officer personnel for each team should not be less than three medical officers who are qualified chest specialists, and two or more officers in the nurses' corps who have had special training in tuberculosis.

3) Enlisted personnel should be technicians and at least 50 per cent should have a working knowledge of the language of the country to which the team would be assigned.

Training of Control Teams

The personnel of each team could be assembled at the most convenient point, and members of the commission instruct the team along the lines laid down by the commission on the basis of assembled information.

Mission of Control Teams

1) To protect our own troops by utilizing all information as to the prevalence of tuberculosis among the civil population in certain areas.

2) To keep in close contact with the medical wards in our hospitals in each army of occupation.

3) To utilize the local physicians, anti-tuberculosis societies and school authorities of each country in making tuberculosis surveys of the civilian population.

4) To encourage the local authorities to make such surveys in their own way, so long as their way is efficient and properly carried out.

5) To furnish school and public health authorities with such educational printed matter concerning the control of tuberculosis as seems best to fit the situation in each country, the printed matter, of course, to be in the language of the country.

6) To exercise patience and understanding, and promote goodwill by encouraging and guiding the local authorities in the anti-tuberculosis program of their country. At the same time, insisting that surveys and control programs be completed as rapidly as possible.

7) To assist in every way in the reorganization of the anti-tuberculosis societies.

8) To encourage and insist upon the isolation and proper treatment of all open cases.

9) To assemble complete information concerning conditions encountered insofar as tuberculosis, its control and treatment is concerned.

10) To keep complete and accurate records, and to compile statistics.

11) To make such reports as may be required by the commission.

Equipment for Control Teams

1) X-Ray Equipment: The number and type of machines required per team could be determined from the assembled information as to the number of x-ray machines and supplies available in each country, as well as the number of machines anticipated to be with our own medical installations and the population of the specific country.

2) Each control team should be equipped with sufficient office material as is necessary to keep records, issue mimeographed instructions, etc.

Administration of Control Teams

1) For administrative purposes, tuberculosis control teams would be attached to some unit of the medical service of our armed forces occupying a particular country.

INFANTILE PARALYSIS

This topic first came to my attention in the year 1896 because of the sudden development over night in a girl of three, who while playing was seated upon a step three inches high, repeatedly bumped herself by sliding from the step to the floor below. This was thought insufficient to cause traumatism of the spinal nerve cells. The next day she awoke with paralysis of the muscles of both thighs and legs, different groups being affected on each side. There was no history of previous illness, no elevation of temperature or other symptoms before the paralysis, which differed in extent in the muscles involved. The exact condition was at once recognized by her physician and she came to Louisville for treatment by Dr. Ap. Morgan Vance, our first orthopedic specialist, and myself. No pain or tenderness had been observed immediately after her paralysis or later. Loss of sensation was not present. Reflexes were impaired. The treatment consisted of complete rest in bed, hot packs over the flaccid muscles with the gentlest possible massage and placing the limbs in a position which relaxed the muscles which were not involved. No stimulation by electricity was employed in accordance with the view that the imbalance would be less.

Later when some restoration of power of contraction had been obtained stabili-

zation by suitable braces was utilized to teach her to walk, successful in part. One stabilizing operation was performed by Doctor Vance and subsequently another by the writer upon the other leg, which with proper shoes enabled her to drive a large Packard car with her legs crossed to get sufficient power to shift gears as necessary. She married, became a fine musician and has three fine sons, two of whom are in the air service of the Army; the younger is a fine musician and teaches music while continuing his education.

It has seemed to me that in more recent years the frequency of this affection has increased, and also the disease has changed some from what it was as observed in those early days. More extensive envolvement and greater deformity have been reported by many observers. Occasional bulbar paralysis, involvement of the muscles of the neck, back and chest with great crippling appear in the reports. Some of my pediatrician friends as well as the orthopedists and neurologists hold that the disease has changed in the pathology, symptoms and crippling which results; moreover there seems to be involvement of other columns of the cord in addition to the anterior poles. Some writers mention that the meninges is at times involved and that encephalitis is observed in some cases.

Dr. Philip F. Barbour takes a similar view of the disease. There is one fact that seems to be noticeable and that is that fewer cases are endemic and a larger number are epidemic.

The early cases gave a history of sudden paralysis quite marked in the affected muscles, without any pain, tenderness or spasticity. More accurate reports in recent years show hyperesthesia, tenderness, spasm of opposing muscles and at times, pain.

Tenderness and pain are likely to be met in nerve injuries as the result of the trauma, congestion and minor hemorrhage at the site of any injury to the spinal cord structure even in the absence of poliomyelitis.

It seems reasonable, from the pathological reports of autopsy findings in the spinal tissues of patients dying of infantile paralysis in recent years, to conclude that more extensive damage has occured and that the causative factor has a greater virulence. Such change in virulence has occurred in the behavior of many organisms and the virus produced in their growth.

Undoubtedly in the first World War the virulence of the organisms causing influenza and the respiratory diseases was increased by crowding soldiers from widely scattered sections of the country into picture shows, and barracks coupled with the fatigue of long marches followed by several hours in poorly heated auditoriums. This opinion was forced upon me when called to tap the chest of a soldier already dying of purulent serositis of every large serous cavity in the body, and any surgery would have hastened his demise which occurred within the hour.

Sister Elizabeth Kenny, who has created quite a stir because of her success in the management of these patients, recently presented her views to the Jefferson County Medical Society before a large and appreciative audience. She claims that she has a new concept of the disease and that the important thing in the management of these cases is recognition of the fact that spasm of certain muscles is the factor which produces the deformity. The overactivity of these antagonist muscles was recognized as the great cause of deformity by many earlier observers. It is quite possible that her claim to have a new concept of the disease and its treatment is not so different from the observations of others in this field as it would at first appear. Certainly she must be given credit for the courage of her convictions.

The strongest point made in her talk was emphasis upon placing spastic muscles at rest in such position that complete relaxation would be produced and prevent the pull the muscles exert to antagonize those which are more or less flaccid. Thus they are permitted to gain tone and opportunity for restoration of function. Certainly the natural forces of repair must not be underestimated as aids to recovery.

She certainly must be given credit for her energy, devotion to her work and the daring and tenacity shown in defense of her views as well as for the many cases she has helped, but more than anything in my judgment, Miss Kenny should be acclaimed for having brought her discovery and her views of the value of the Kenny Treatment to the medical profession and then bided her time with patience until the profession could, after research and study, evaluate her claims. We might consider that she could have gone astray

and sought approval of agencies other than that of the medical profession.

Her method has been employed at the Kosair Crippled Children's Hospital under the observation of the staff, and the direction of Milton J. Wilder, M. D., Resident, and John J. Untereker, Physiotherapist. A list of fifty-three cases so treated within six months with typed facts concerning the results was presented to all who desired to hear her results.

Until the recent work of Jungeblut and Dalldorf of Columbia University no one has brought any proof of the possibility that animals, other than monkeys, were susceptible. Their work has been described in an editorial in the Journal of the American Medical Association of May 1, 1943, page 40, which tells how they learned from a study of five cases of poliomyelitis that occurred in a circumscribed area in New York State an extrahuman source of this disease in house mice and the lesions were transplanted in other mice. The attention of the readers is called to work which is most important particularly in showing the way to the prevention of the spread of this affection to both children and adults. Attention is called to the possibility of this disease being transported by way of the alimentary tract perhaps aided by flies and other insects, as was first advocated by Rosenow and McCormack rather than as formerly believed by the air as one of the respiratory diseases.

Doctors Caudill, Teague and South of the Kentucky State Department of Health have emphasized the importance of sanitary measures, carried out with care, in arresting its dissemination, which is by far the most certain and satisfactory method of approach as against the best efforts to cure the paralysis which follows its presence and is so crippling in its results.

J. G. SHERRILL

BANGLES

In the office of the State Medical Association will be a placard for permanent place for the bangles and we need the following: 1914, Newport; 1915, Louisville; 1916, Hopkinsville; 1917, Louisville; 1918, Louisville; 1925, Louisville; 1926, Frankfort; 1928, Richmond; 1937, Richmond; 1938, Louisville; 1940, Lexington. Any physician who will part with these bangles, please mail to Dr. L. H. South, Business Manager, as they will have a permanent place in our museum.

THE WAR CASUALTY

The recent session of the House of Delegates of the American Medical Association was a most interesting and constructive one. We trust that the members of our profession in Kentucky will read the whole report as it appears in the Journal of the American Medical Association.

It is rather remarkable that less than half the members of our Association have become fellows of the American Medical Association, although all of them are eligible for Fellowship. We frankly don't see how a man can practice medicine today without the Journal of the American Medical Association. It is not only the best scientific publication in the world, but its current information in regard to war medicine, medical organization, industrial medicine and nutrition seems to us to contain essential facts without which we would not know how to orient ourselves in the changing world in which we live. We would like to urge that those of our readers who are not Fellows of the American Medical Association send their names in to 535 North Dearborn Street, Chicago, Illinois, immediately and begin to get this great medical publication.

As our members know, the House of Delegates of the American Medical Association is made up of representatives from the 48 State Societies, from the 16 Scientific Sections and from the Army and Navy and Public Health Service. This was the year for the reapportionment and Kentucky and North and South Carolina became war casualties—each losing one Delegate. Connecticut, New York and Ohio each gained one. While our membership was exactly the same last year, for the first time in many years we failed to secure new members because all of our young physicians are in the Army. For the next three years, therefore, Kentucky will have two Delegates. Tennessee lost their third Delegate at the last reapportionment three years ago and it seems only a question of time when all the rural states will have but one and the control of the Medical profession will pass into the hands of the Delegates from those states having large cities.

During four years 1937-1940 tuberculosis caused more deaths in the United States than were caused by all the battles of all the wars in which this country has been engaged, beginning with the Revolutionary War and continuing through the first World War. Robert Plunkett, M. D., N. Y. State Dept. of H., Bull. Feb. 1943.

ORIGINAL ARTICLES

PRESIDENT'S ADDRESS

Irvin Abell, M. D.
Louisville

It has been customary for the President of the Jefferson County Medical Society to present a formal address in which policies and events concerning the Society were discussed. Having served an interim vacancy of but two months, I have prepared no formal address, but with your indulgence will discuss briefly some of the implications brought to the fore by war.

The passage of the Selective Service Act, which granted no mass deferments other than to Ministers of the Gospel and theological students, threatened not only to disrupt the then classes of the Medical School of the University of Louisville, but to limit applicants for entrance to those physically unfit for enrollment in the Armed Forces. The importance of maintaining a continuous flow of medical graduates for service in the Armed Forces and to the civilian population is such that two measures were adopted to minimize or eliminate this threat; one, a more liberal interpretation of the Selective Service Act, which permitted medical students maintaining a satisfactory scholastic standing in approved schools to continue the medical course to completion, with the provision for reclassification every six months; the other, a decision on the part of the Army and Navy to permit medical students to enter the Administrative and Ensign Reserve Corps, whereupon they were placed on an inactive status, automatically eliminated from the draft and allowed to complete their undergraduate training, with the obligation of accepting a commission for active service upon completion of the intern year in an Army, Navy or civilian hospital. These measures gave adequate protection for the then classes, but made no provision for premedical students. Efforts were made to cover this gap, resulting in the Navy agreeing to accept premedical students in the Ensign Reserve Corps: the Army declined to make any concession further than the acceptance into the Administrative Corps of those students who had completed the premedical course and who had been accepted by an approved school as an enrollee in the Freshman Class. This was the status when the Selective Service Act was amended to include all who had reached the age of 18, which amendment not only threatened the enrollment of medical students, but as well those of all educational institutions above the high school level. Upon presentation of the problem to the War Manpower Commission by educational bodies, the Commission decided to allocate 250,000 inductees as students in the various colleges, emphasis being laid on courses having a direct bearing upon the war effort. These students will be in uniform, under military supervision, educated at governmental expense and will give to our colleges and universities a resemblance to military camps. The medical school is thus assured of its quota of students. One interesting and important question which can not be answered in the light of the knowledge presently available refers to the method of selection of students for the study of medicine. Heretofore the medical school has had from seven to eight hundred applications for the ninety places in the Freshman Class, affording opportunity for a judicious selection from the best prepared applicants. Assuming that the selection is now to be made by federal agencies, will the same care be exercised in securing worthwhile material for the making of doctors? This point is brought to mind by an experience of the Surgical Committee of the National Research Council, of which I happen to be a member. The number of men in certain highly specialized groups, namely, neuro, chest, maxillo-facial and plastic surgery, is so small as barely to cover civilian needs. The Surgical Committee arranged courses in certain of our schools and clinics covering these fields, with the idea of having the Army and Navy send to them young officers who possessed a good, fundamental surgical background and who could be expected to acquire a training that would insure the proper first aid to patients whose injuries fell within these classifications. The selection was delegated to the Service Commands, with the result that of ten officers sent to Columbia for the maxillo-facial course, seven were dentists who had no surgical background and whose experience was limited to the filling and extraction of teeth. They knew nothing of hemorrhage, shock and transfusion and were ignorant of the terms employed in the discussion of such. In order to increase the number of graduates in medicine, the American Medical College

Delivered before the Jefferson County Medical Society.

Association at its 1941 meeting adopted an accelerated program for its members in which students are graduated at the end of thirty-six months of continuous study instead of at the end of forty-eight months, with eight months of study in each calendar year. This plan will increase by one-third the annual number of medical graduates. When one considers the number of teachers taken from the medical school both by voluntary enrollment and by the requirements of the draft, it becomes apparent that the teachers remaining in the school are faced with a task of no little difficulty and magnitude. Should the incoming classes under federal selection be less than apt and mentally well prepared, these two factors will inevitably detract from the maintenance of a high educational standard. Another impact upon the medical school and the hospital is the ruling that no member of the house staff physically fit for military service may remain longer than two years after the intern year. This means that postgraduate education for the specialties is out for the duration of the war. The specialty boards have prescribed curricula and standards which demand rather prolonged hospital training, a requirement that can not be met with this restriction in force. The members of the Jefferson County Medical Society have faithfully discharged their obligations in respect to civilian care and have cheerfully accepted new ones as requested. Dr. Leavell, finding that the various city services for the care of the indigent were being depleted by the entry of the young members into the Armed Forces, applied to the County Society for volunteers to replace them. The response to the questionnaire sent the members was most gratifying in that the vacancies were quickly filled. Capt. W. B. Atkinson, of the Selective Service Board, sought the assistance of the County Society in furnishing members of the Army Service Board in carrying out the examination of inductees at the Armory. While this questionnaire has but recently gone out, sixty white and seven colored doctors have volunteered to serve. The remuneration offered is but a pittance of what the doctor at home can earn today, but the opportunity is offered our members to perform a patriotic service just as essential as that in the Medical Departments of the Army and Navy. One hundred and sixty-nine of our members are serving on the draft and advisory boards, thereby evincing a commendable public spirit. The normal membership of the County Society is approximately 475: today the list of active members totals 337. Many of these are today feeling or will soon feel the stress and strain of overwork occasioned by the absence of so many of our confreres. The situation is not that which the stay-at-homes would voluntarily seek, but that which they accept as an inherent duty and obligation. From an experience in both groups I have no hesitancy in saying that the work of the stay-at-homes is greater, more arduous and more trying at all times than that of the officers in service, with the exception of periods of combat. The ratio of doctors to the population of Louisville has not been lowered to an extent incompatible with good service short of a major disaster or epidemic, but to an extent which calls for the best effort of each and every one of us. Each preceding war has developed a similar situation and in each instance the responsibility has been confidently met and satisfactorily discharged. The medical profession has never been remiss in its obligation to the Armed Forces and to the civilian population when war clouds bedimmed the horizon. In the Revolutionary War fourteen hundred doctors served with the colors. In the War of 1812 the doctors were found side by side with their combatant brothers in arms. In the War of the Rebellion twelve thousand doctors served with the Federal and nine thousand with the Confederate Forces. In the Spanish American War they were again equal to the occasion. When the Armistice was signed in November, 1918 thirty-one thousand, five hundred doctors were in uniform. Today between forty-two and forty-three thousand doctors from civilian life are serving with the Armed Forces, one hundred and forty-four of whom are members of the Jefferson County Medical Society. We are justly proud of them, knowing full well that they will give a good account of themselves and reflect credit upon the Society from which they stem. We can only hope and pray that they will return to us safe and sound to resume their place in civilian life, secure in the regard and esteem of those of us left behind and consoled and comforted by the spiritual exhilaration that comes from the faithful discharge of a patriotic duty.

PROCUREMENT AND ASSIGNMENT SERVICE

E. L. Henderson, M. D.
Louisville

It was thought that you were entitled to some report on the Procurement and Assignment Service insofar as it affects the medical profession. As Chairman of the Fifth Service Command for the Procurement and Assignment Service, I have been requested to tell you something about what has been done. There has been so much unfounded criticism, both from within and from without the medical profession; so much misunderstanding among the profession and laymen that I think you are entitled to the truth about the induction of physicians in Kentucky.

Some of the critics of Procurement and Assignment Service have even gone so far as to say that there were politics in Procurement and Assignment Service. I want to tell you that this is absolutely untrue. I have had several letters from the various states in the Fifth Service Command making accusations of indiscriminate dislocation of doctors and also accusations of political influence being used. Each and every one of these instances has been investigated by me personally and I have not found a case where doctors were indiscriminately dislocated from their practice or where any political influence was used.

I have been especially interested in Kentucky and have met with the state committee and various local committees and district committees the same as I have in the other three states in this Service Command and I want to tell you that at no time have I seen any case where partiality was shown to any one or any case where political pressure was used. Every man, connected with Procurement and Assignment Service in any capacity about whom I have known, has absolutely refused to let politics be injected into it in any way. I have met repeatedly with the Local Committee here in Louisville together with the State Chairman, Dr. McCormack, and I have never known any more conscientious group striving to do what is just to accomplish the end designated for us.

It is true we have had plenty of criticism from laymen. For instance, the Local Committees and the State Chairman have frequently been approached by various laymen who had some special pediatrician, surgeon, obstetrician or some other specialist whom they thought should not be called into the service. We have all received petitions from various sections of the country insisting that we must not send this or that doctor to the Army when there was no reason in the world why that individual doctor should not be in the service.

The report has been circulated that Kentucky was furnishing more doctors than any state in the Union, that the State Chairman of Procurement and Assignment Service for Physicians, Dr. A. T. McCormack, was endeavoring to put every doctor in the state in the Army or Navy, or was trying to make a record for himself on furnishing more doctors than any other state in the Union, when the truth is far from such accusations. As you may know, a quota for 1942, based on the number of doctors per capita inhabitants in each state, was specified by the Directing Board of Procurement and Assignment Service in Washington. Quite a number of states exceeded their quota considerably earlier than Kentucky, I am sorry to say.

It was understood from the beginning, that the Medical Officer Recruiting Boards would be withdrawn as soon as the states filled their quotas for 1942. Being more familiar with the Fifth Service Command, I can be more specific in my remarks in regard to the states in this area. Indiana, which has considerably more physicians than Kentucky and a quota almost double ours, filled its quota by July 1 and the Recruiting Board was therefore withdrawn from that state. West Virginia finished by Aug. 1 and the Recruiting Board was then withdrawn. Although Ohio lagged at first, I am happy to say that at this time they have met their quota for 1942. The Kentucky Recruiting Board was withdrawn on August 15 when we were about thirty-four short of our quota. That should be answer enough to convince our critics that those in charge of Procurement and Assignment Service in Kentucky have not endeavored to send anyone into the services who should not be in or have been trying to dislocate doctors indiscriminately from their civilian practice.

One of the main functions of Procurement and Assignment Service is to prevent the indiscriminate dislocation of doctors from communities where they are most needed, and to endeavor not to take all the doctors from one state or from a

Read before the Kentucky State Medical Association, Louisville, September 28 - October 1, 1942.

few states without having the burden properly distributed. It is true that some of the states—principally the larger and more thickly populated with the most doctors, e.g. New York, Pennsylvania, New Jersey, Michigan, Illinois and California have not come up to their quotas. Of course, there is more than one reason for this. When the recruiting Boards were first appointed, only one Board was sent to each state but it was found necessary, in the states with larger quotas, to employ additional Boards to accelerate recruitment of medical officers. It is my belief that before a great while the armed forces will have a sufficient number of doctors to take care of their needs.

In World War I, Kentucky furnished 834 physicians to the armed forces. Today, the number of doctors from Kentucky, is approximately 300 less than at the end of World War I. Of course, it is true that we had approximately 200 more doctors in the State of Kentucky than we have at this time, but the distribution of doctors was somewhat better in those days. Some of the counties in Kentucky do not have sufficient doctors to give adequate medical care but this was true before Procurement and Assignment Service began to function. For instance, in Jefferson County, before war was declared, there were approximately 593 people for each doctor in the county; today, there are approximately 847 people per doctor in the county. In Fayette County before Pearl Harbor, there were 535 people for each physician; today, there are approximately 743 people per physician. In Breathitt County, before the war, there were approximately 4859 people for each physician; at the present time there are approximately 12,148. This is the result of faulty distribution of physicians and because there were two doctors belonging to the Medical Reserve Corps who were called into active service. Procurement and Assignment Service did not take any doctors from Breathitt County. In Breckenridge County, there were 1977 people for each doctor and today the proportion is the same. Butler County had 3648 and today has the same number. As a matter of fact, there are forty-two counties in Kentucky which have furnished no physician to the Army, the Navy or the U. S. Public Health Service. In other words, Procurement and Assignment Service has not taken doctors from the communities where they were really needed. It has been necessary to defer some of the younger doctors of the state because they were located in communities where their services could not be spared. Procurement and Assignment Service has been just as zealous in taking care of the civilian population as it has of the armed forces.

If this war continues as it looks at the present time that it will, more doctors will be needed from Kentucky, the same as from every state in the Union and I am sure that the medical profession of Kentucky is going to continue to do its duty. I want you to know that every member of the Procurement and Assignment Service, from the Local Committees up to the Service Command Committees, has done his very best to see that Procurement and Assignment Service functions justly and efficiently. I especially want to commend the Local Committees and your State Chairman of Kentucky, for their honest, conscientious work. They have had a tremendous task and they have performed it well.

SYMPOSIUM ON VITAMIN-B COMPLEX

VITAMIN-B COMPLEX

C. Wm. Dowden, Jr., M. D.
Louisville

Among doctors, it is not surprising that a great deal of confusion and scepticism exists about all vitamins, because of extensive advertising in papers, periodicals, and on the radio, and also because vitamin prescriptions of various sorts seem to produce no results in their patients. Naturally, free sale of vitamin products across the counter will lead the layman to buy them for himself, diagnosing his own case as a vitamin deficiency, because he is tired all the time, has no appetite, is losing weight, etc., when he is in reality suffering possibly from tuberculosis, diabetes, or from any other organic disease. In this respect, the vitamins are definitely dangerous in that appropriate therapy is too long postponed; but it does not mean that there is never a place for vitamin, especially B-Complex therapy. It has repeatedly proved its worth in frank cases of pellagra and beri-beri, and it is reasonable to assume that it might be effective in the earlier or subclinical stages of these conditions, provided they are recognized.

No attempt is to be made in the following discussion to cover all aspects of the

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Vitamin-B Complex, and it is probable that the surface will merely be scratched, judging from the accumulation of literature in recent years, since thiamin chloride, nicotinic acid (niacin), riboflavin, etc., have been synthesized. The best known components of the B-Complex, therefore, mainly those mentioned above will be dealt with. The remaining, and less understood factors such as pyridoxine, pantothenic acid, etc., will be mentioned briefly for sake of completeness only. No doubt many of you are familiar with the data as follows: Most of it is obtained from the literature in the past three or four years, by such writers as Syndenstricker, Spies, Elvehjem, Jolliffee, Harris, Sebrell, etc., and their co-workers, who it seems have contributed immeasurably to the present day knowledge of Vitamin-B Complex.

It is not to be understood that the feeding of vitamin pills, or proprietary preparations, is encouraged if an adequate diet will fulfill all the necessary requirements. The synthetic components of vitamin-B Complex are very useful, however, when there is reason to suspect that there is faulty absorption of or a greatly increased demand for vitamin-B Complex. Achlorhydria, diarrheas, hyperthyroidism, hyperpyrexia from any cause, and many other conditions might occasion such suspicions.

The best natural food sources of thiamin chloride are dry brewer's yeast, pork, peanuts, oatmeal, whole wheat, peas and eggs—in the order mentioned. Brewer's yeast and peanuts are also relatively rich in nicotinic acid, but the best sources of this component are calf and pork liver; beef and poultry are good sources. Riboflavin is found to be high in pork, and calf liver also. Of course, other foods contain appreciable amounts of thiamin, but are relatively low per unit of weight.

It is stated by Elvehjem that "at least five to ten servings (100 gms) of the individual foods must be consumed daily to meet the minimum daily requirement" of thiamin chloride, if the richest food sources are not included in the daily diet. It might thus appear that thiamin-deficient diets are more prevalent than one would suppose. Dietary surveys have confirmed this also, especially among the lower income groups.

Thiamin Chloride, Vitamin B: This factor has been shown by Wilder, Williams, Mason & Smith of the Mayo Clinic to be essential for well being, and normal behavior of the group of 11 human beings studied. Under carefully controlled experiments definite changes were noted in the reactions of all subjects. Most of these were of a subjective, rather than an objective nature. The symptoms were proportional to the degree of thiamin deprivation. The group subjected to an allowance of less than half the normal daily requirements for thiamin chloride (.45 mgs) within a period of eight to twelve weeks became irritable, uncooperative, depressed, quarrelsome and had a sense of impending disaster. They apparently also became incoordinate in their usual duties, memories were impaired and complaints of numbness of hands and feet were voiced. Also, headache, backache, insomnia, etc., were complained of after a few weeks of the thiamin restricted diet.

In the same group, laboratory tests were interesting also. Estimations of the blood pyruvic acid seem to parallel the degree of thiamin deprivation, e.g. elevated values in prolonged thiamin deficiency and vice versa. (For details: J. Biol. Chem. (140) Sept. '41). It might be mentioned at this point that urinary excretion of thiamin chloride in general has been found to be inversely proportional to the degree of B-1 deficiency. (H. J. Borson, Ann. Int. Med. (14) July '40). Thus it is encouraging to know that there may be some tangible evidence of an early vitamin deficiency by means of a specific laboratory test, just as there is in diabetes mellitus by means of blood sugars, or, early pulmonary tuberculosis by means of x-rays. (Incidentally, these two casually mentioned maladies of course should always be ruled out before vitamin pills are prescribed.)

The Mayo group also found that their thiamin deprived patients gradually returned to a normal state when adequate thiamin chloride was supplied. It is their belief that such prolonged, moderate restrictions of this vitamin require a longer period of time for complete relief of symptoms when adequate thiamin is again included in the diet.

This experiment, then, is an excellent example of the effects produced by a moderate restriction in thiamin chloride over many weeks time. Symptoms which also may be indicative of thiamin deficiency are anorexia, nausea, and constipation.

In the general run of office patients in any doctor's files, there are always a goodly number of cases who present symptoms such as those above and are usually dub-

bed "neurotics," "neurasthenics" and the like. But if a dietary history in these patients points to a definite deficiency of thiamin—or any other components of the B-Complex—correction of the diet or supplementing it with the missing factor may produce gratifying results.

It seems that a frequent remark made by patients taking thiamin chloride, or preparations of whole B-Complex, is that their appetite is definitely improved and that they feel stronger. It has been observed, also, in occasional instances that after a few weeks feeding of thiamin chloride, or whole B-Complex preparation, rather obstinate constipation of long standing is corrected. Nervousness frequently also is reduced or relieved. Although frank cases of beri-beri are not as often encountered as the subclinical vitamin-B-1 deficiency states, it has been demonstrated that edema, cardiac enlargement, dyspnea, etc., incident to cardiac failure is relieved by the oral and parenteral administration of large amounts of thiamin chloride.

For sake of brevity, in general the thiamin chloride daily requirements are directly proportional to an individual's activity, metabolism and carbohydrate consumption. The average is about 1mg. or 333 I. U. as a minimum for the adult. Pregnancy, lactation, hyperthyroidism call for increased thiamin, as do also growing children, patients who for any reason receive large amounts of glucose parenterally, and possibly diabetes. In suspicious or definite cases of B-1 deficiency, however, from 5 to 100 mgs., of thiamin orally or parenterally can be given as the case demands. Although occasional isolated instances of severe, anaphylatic-like reactions have been reported from intravenous use of thiamin, it is generally thought to be harmless in even massive doses.

Nicotinic Acid and Riboflavin: These two factors might be dealt with together, since deficiencies of one are often associated with deficiencies of the other. However, pure deficiencies of only one or the other alone are encountered. The typical full-blown pellagrin of course is the best example of severe nicotinic acid (niacin) deficiency, and usually riboflavin also, with marked disturbances mainly in the nervous and gastro-intestinal systems, and the skin. Without going into detail, in general, these patients may have many psychotic reactions, or, even be stuporous or comatose. The whole alimentary tract seems involved in that the tongue is sore, reddened, swollen and smooth—glossitis, gingivitis, gastritis (if it may be called that), proctitis, etc. Various digestive complaints as burning, cramping, diarrhea, etc., usually result. The genito-urinary tract may be involved in a similar reaction, producing urethritis, cervicitis, etc. These are all more or less signs and symptoms specific for nicotinic acid deficiency. Likewise, riboflavin deficiency is thought to have specific signs such as corneal vascularization and opacities, keratitis, fissuring and maceration at the corners of the mouth, and rawness at the muco-cutaneous junction about the nose and sometimes the eyes, etc.

So much for the clear cut, advanced deficiencies—which are in the minority compared to so-called subclinical varieties—many of the earliest and mildest cases perhaps suggesting themselves by vague and intangible symptoms, which may be interpreted as a neurosis. Objective evidence of early deficiency is probably present to a greater degree than in thiamin deficiencies, however, the tongue may burn slightly and may show an abnormal smoothness and reddened tip, or edges; Vincent's angina may be present; there may be a tendency toward lacrimation, or the cornea may appear injected, or slight cracking or scaliness at the mouth corners may be seen. In addition, subjectively, vague digestive symptoms may be complained of, and also nervous irritability and insomnia, etc. In other words, these individuals are sick, and usually can't understand why.

If a true deficiency does exist, response to adequate nicotinic acid (niacin) the amide, or sodium nicotinate and riboflavin should be prompt, and many times dramatic. It has been repeatedly demonstrated that the glossitis, cheilosis and mental and digestive symptoms will clear up with sufficient doses of these vitamins. Recently, an elderly female (75 years) diabetic, fairly well controlled on 24 units of P. Z. insulin had an appendiceal abscess, ran septic temperature for about a week during the localizing process, and during which time large amounts of glucose I. V. were administered. A few days preceding and for several days after surgical drainage, extreme soreness of the tongue was complained of. The tongue was a bright red and appeared smoother than normal. Fissuring at the corners of the mouth appeared. Nicotinamide, 100 mgs., thiamin 10 mgs., riboflavin 2 mgs.,

(Squibbs, Parentosol-B) was given I.V., and 500 mgs., nicotinamide, 5 to 10 mgs., riboflavin were given daily by mouth: 2 cc Crude Liver Extract also daily I.M. In about three days the glossitis and cheilosis had apparently cleared completely. Other similar instances have been observed. Ellenberg and associates emphasize that many patients pre and post-operatively may be depleted of their vitamin stores by restricted diets, I.V. glucose, etc., and cites a case of dramatic response to niacin therapy. The dose may vary from 50 to 1,-000 mgs., daily in about 8 or 10 divided doses.

A brief mention of one or two additional instances of response to B-Complex therapy might be appropriate at this point. A female, age about 50, who for several months complained of intermittent burning sensation of the tongue, responded to I.M. liver extract rather promptly in two or three days. Aside from slight degree of diverticulitis, a mild secondary anemia, and a rather typical glossitis with a smooth fiery red tongue, no organic disease was demonstrable. However, lack of co-operation on the patient's part made it impossible to secure some examination that would have been desirable, such as a gastric analysis, and possibly blood chemistries. The response was felt to be definitely associated with the parenteral administration of liver extract, because she would repeatedly return for another injection in spite of the fact that they were very disagreeable to her, since this seemed to be the only thing that ever relieved the troublesome soreness of her tongue. In addition to this, over a period of several months there was substantial gain in weight, and improvement in vague digestive symptoms.

Another case, age 72, had been on a grossly deficient diet for a great many weeks, consisting mainly of about 4 to 8 ounces of milk, fruit juices, with occasionally soup daily. She had made an attempt to treat herself by vitamins, sedatives, tonics, etc. Extreme malnutrition, typical glossitis, a burning sensation in the rectum and vague digestive complaints were constantly present. After a week or so therapy with nicotinamide in 100 mgs., doses five times daily, varying amounts of thiamin chloride, and I.M. liver extract every second day, the patient began eating for the first time in many weeks. Continuation of this regimen resulted in a gain of about 20 pounds in weight and ability to be up and about instead of completely bed-ridden because of weakness, loss of interest, etc. This might illustrate that even though many elderly patients' complaints may be a natural result of old age, an arteriosclerosis, it is entirely possible that many of their infirmities may be due to lack of essential elements in their diet. It has been reported that diabetics, whose diets have been changed to a high carbohydrate variety with a proportional increase in insulin have manifested signs of nicotinic acid and possibly riboflavin deficiency, mainly glossitis, stomatitis, etc., which promptly responded to adequate B-Complex or niacin therapy. It is understandable when it is kept in mind that the B-Complex requirements are proportional to the carbohydrate intake. The daily requirements of nicotinic acid, although no definite figure has been estimated, is thought to be in the neighborhood of 18 to 25 mgs.

Crude liver extract is probably the best, if not the only, source of the whole B-Complex for parenteral use to my knowledge. It is supposed to be richer in B-Complex as compared to the more highly refined and concentrated extracts used in pernicious anemia, such as Reticulogen and other preparations containing 10 or 15 U. per cc. In the refining process apparently some of the B-Complex is sacrificed.

Considering the therapy for suspected or typical vitamin deficiency, in general it probably can be safely stated that in cases of apparent deficiencies of any of the three mentioned components of the B-Complex it is best to always administer the whole Complex. It is probable that a pure thiamin, niacin, or riboflavin deficiency never exists alone from dietary lacks. As has been stated, any of the three components may be administered, either orally or parenterally. Parenteral administration is the surest in that if there is any question of faulty absorption by the intestinal tract, this is eliminated. Thiamin chloride for therapeutic purpose may be given in daily doses in the neighborhood of 5 to 30 mgs., by either the parenteral or oral route. Much larger amounts can be given with safety however. A satisfactory method that has worked well in several instances, is the administration of 1 or 2 cc of Crude Liver Extract and 25 to 50 mgs., of thiamin chloride I.M. (in the same syringe) daily or every three or four days. Since many patients with the symptoms of glossitis, cheilosis, etc., are

very likely anemic and possibly have low gastric acidities, or even an achlorhydria, prescriptions can be written to include dilute hydrochloric acid, and iron along with a combination of the synthetic factors in a vehicle of some good B-Complex syrup or elixir. Of course, dry Brewer's yeast should not be forgotten in any B Complex therapy, and this can be given in variable doses as the occasion demands, as much as 100 or more grams daily, or as little as four or eight grams daily may be used.

In the way of a summary then, concerning the three most commonly used B-Complex factors, we might say:

1. Varying degrees of vitamin-B Complex deficiencies may be present to a surprising degree, and possibly more so at the present war time, with its hurried noon meals of perhaps a tomato sandwich (white bread) and a "coke," possibly coffee and orange juice for breakfast.

2. Many so-called "neurotic" individuals may actually be suffering from nutritional deficiencies, even though they may appear well nourished.

3. Adequate administration of the necessary B-vitamins definitely produce results in clear cut cases. The therapeutic test in more ill defined cases may bring about marked improvement.

VITAMIN B COMPLEX USED IN NEUROPSYCHIATRY

E. E. Landis, M. D.
Louisville

It is my purpose to very briefly describe some of the clinical pictures seen in neuropsychiatry which have been reported as caused by vitamin B deficiency.

The neurasthenic syndrome has by some been considered to be a symptom complex produced by mild deficiency states. I have heard such cases reported by Dr. Spies and others. However, most of the authors considered agree that this does not account for the psychogenically determined difficulties which respond to psychotherapy. If we consider the field of the psychoses, there is more clear cut information available. By the very nature of many mental illnesses, patients become involved in conflicts resulting in feeding disturbances, that is, attempts at starvation, ideas that food has been poisoned, and disinterest in food. As a result of this there frequently are clinical syndromes produced simulating the specific deficiency groups, such as pellagra and beriberi, which have been discussed by Dr. Dowden. These patients respond very promptly to massive doses of thiamine chloride intramuscularly and the other parts of the whole vitamin B complex. The toxic delirium which they are prone to develop shows dramatic improvement usually within 48 hours, although the basic psychotic features persist. Such superimposed syndromes are not unusual in senile pyschosis, manic-depressive episodes and schizophrenia.

A tremendous amount of controversy has existed concerning the role of vitamin B in alcoholism:

Jolliffe and Wortis concluded that the cerebral complications of chronic alcoholism are more likely due to metabolic and more specifically avitaminotic disturbances than to direct toxic action of alcohol on the nervous system for the following reasons:

1. Diet is deficient in food and vitamins. 2. Associated gastritis and hepatitis cause inpaired gastro-intestinal absorption. 3. Increased metabolism occurring in alcoholic states, especially delirium tremens requires a larger supply of all nutritive essentials as well as vitamins.

The most commonly known severe alcoholic complication is delirium tremens.

These patients almost always have a low vitamin C content of blood and spinal fluid. Peripheral neuropathy is present in about 30%. In spite of the fact that in such patients cerebral edema may exist the spinal fluid pressure is usually not increased.

Wortis and Marsh showed that alcoholic addicts without neurological or mental changes did not show the vitamin C deficit. The literature contains many references to the value of nicotinic acid and thiamine chloride in the treatment of delirium tremens. There are others who have noted no difference in results with and without vitamin B. One experimental case has been reported in which delirium tremens was produced while receiving huge doses of both B_1 and nicotinic acid, but allowed to drink about one quart of whiskey daily. The delirium started in 13 days.

On the basis of some very careful and impressive work there is advanced the opinion that deficiency of vitamin B_1 and nicotinic acid is not the specific causative agent in the production of delirium tre-

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mens, but the condition resulting is of considerable importance in producing known nutritional encephalopathies such as nicotinic acid deficiency encephalopathy and Wernicke's syndrome.

Many patients with delirium tremens recover rapidly with salines and fluids, however, because it is almost impossible to determine in the 70% without neuropathies which are near vitamin depletion, we routinely place such patients on accessory medication with vitamin B_1 and nicotinic acid as well as the total B complex.

The 30% of delirium tremens cases showing peripheral neuropathy show pronounced response to massive doses of thiamine chloride given intravenously or intramuscularly. Clinically this complication is characterized by bilateral involvement, usually symmetrical. Early there are numbness and tingling; then, plantar dysesthesias and calf tenderness, and later loss of ankle, knee jerks, and position sense and light touch. Pathologically there are found early reversible changes in the myelin sheaths with swelling, and droplet formations; if continued, further degeneration of the axis cylinder. The pathogenesis of such condition is unknown and for this reason leaves open the argument as to whether this is a specific vitamin deficiency. Similar lesions have been reproduced experimentally with vitamin B deficient diets. From clinical observation such patients do show reversible reactions with supportive treatment.

The next more severe alcoholic disturbance represents a more advanced irreversible reaction which is said to have been reproduced by multiple vitamin deficient diets. This has been described as Wernicke's Syndrome which is characterized by clouding of consciousness, varying ophthalmoplegias, and ataxia. In the original description alcohol was not a factor in the first case which was a case of intractable vomiting with pyloric stenosis. Pathologically there are seen capillary hyperplasia and petechial hemorrhages around the aqueductal and ventricular gray substance. Early such cases show bilateral 6th nerve palsy and later partial or complete 3rd nerve dysfunction. The ophthalmoplegias in such cases respond to treatment with thiamin chloride in large doses, but the ataxia is not relieved by such methods. There usually remains after adequate treatment a Korsakow-like syndrome which is characterized by degeneration centrally, defective memory for recent events, and a tendency to confabulate.

In addition to the above syndromes there has been described a nicotinic acid deficiency syndrome seen in alcoholics. Such patients show the usual pellagra-like psychosis with disorientation, confusion and memory gaps. They may show periods of mania, depression and delirium with cogwheel rigidities previous to any other pellagra-like manifestations and are said to respond dramatically to massive doses of nicotinic acid along with adequate dietary regime. Some observers have maintained that this is an acute, rapid process, whereas in those cases developing pellagra-like disturbances, G. I. upsets, skin manifestations, the process has been chronic. The 95% mortality has been dropped to 15 % where hydration therapy with nicotinic acid is used.

The use of vitamin B in numerous neurologic conditions has been mentioned but it is not my purpose to enter this controversial question. Such use has been emphasized by Palmer for treatment of migraine headache, by others for the various amyatrophies, neuralgias, etc. The reports are often disappointing.

There seems to be a real place for vitamin therapy but that there is great risk involved in the tendency to rely on a routine use of such in some of the alcoholic conditions is best illustrated by a case entered on the psychiatric service of the Louisville General Hospital this past week. The patient, a female, was accompanied by a very plausible history of chronic alcoholism over a long period, recent increase in alcoholic intake, poor nutrition, and a clinical picture of delirium, dehydration, inanition, and pronounced tremor. She failed to respond to supportive treatment and a prompt investigation showed her to be suffering from a bromide intoxication superimposed on the alcoholic picture.

In conclusion I wish to state that where vitamin deficiency does exist we are not satisfied with small dosage because irreversible changes may result in a relatively short time. In addition realizing that vitamins are usually only one factor in such illnesses, additional supportive treatment is given. By this I mean a full adequate diet, fluids, saline, and glucose with particular attention to any other complicating factors.

DISCUSSION

Ben H. Hollis: In my own practice, in trying to figure out what a practicable application of vitamin therapy would be, if I had to take in my own practice just one condition where I would want to retain the use of vitamin B complex, that would be in the treatment of peptic ulcer. It has been spectacular to me to see the relief of pylorospasm, the return of appetite, the healing of the gastritis, with intravenous B complex. Now, in most of my cases, certainly, I would not attempt to treat peptic ulcers, either in the stomach or duodenum, without the use of B complex intravenously.

I was glad to see some work done at the University of Minnesota on dementias. They were using crude liver intravenously. 10 c.c. of 1 unit liver in 500 c.c. of glucose. It was certainly spectacular to see the improvement those people made with something I would not dare to use.

C. Wm. Dowden, Jr., (in closing): I was interested to hear of Dr. Hollis' use of the B-complex in peptic ulcer and particularly so in pylorospasm. It would certainly seem the logical thing to use, since many functional gastro-intestinal disturbances respond readily to B-complex therapy. Of course, the addition of Vitamin-C to an ulcer diet has always been advisable.

Regarding Dr. Stites' statement about the exploitation of vitamins, the lay people can hardly be blamed for misusing them because of the way in which they are advertised on the radio and in the newspapers. The potencies of many vitamin products are expressed in terms of micrograms, which to be sure presents an imposing array of figures, but when boiled down to actual milligrams, or portions of a gram comparatively amounts to but a "drop in the bucket."

What interested me mainly about nicotinic acid, or the whole B-complex, was its use in pre and post-operative patients, or, in patients who for any reason received large amounts of parenteral glucose solution over long periods of time. There seems to be no doubt that in a short period of time they develop a rather typical pellagrous stomatitis and glossitis. The administration of adequate nicotinic acid, and possibly the whole B-complex in the form of parenteral liver, results in a complete clearing up of these symptoms within a few days.

I was in hopes Dr. Dowden, Sr., would mention a case of his, in which apparently a severe febrile resulted about six hours following the intravenous injection of 100 milligrams of thiamin chloride. It seemed that this reaction was definitely tied up with this sole means of therapy, since it was repeated twice and the exact sort of response seemed to result. However, the neuritis that was complained of, did seem to improve rather markedly in spite of such reaction. I believe one instance of idiosyncrasy to thiamin chloride has been reported in the literature, but there are probably thousands of cases receiving it every day, without any toxic reactions whatsoever.

E. E. Landis, (in closing): We did have a chance to try a small series of cases of amyotrophic lateral sclerosis on massive doses of B_6 but were somewhat disappointed in the results. Following Dr. Wexler's original report I think he too has been more guarded in his evaluation of such therapy. Nevertheless since these cases are usually considered hopeless and some benefit has been reported, I certainly would utilize them for what improvement they might give.

FORT KNOX STATION HOSPITAL ORTHOPEDIC ACTIVITIES

KERWIN A. FISCHER, MEDICAL CORPS
Fort Knox

This institution is one of the class of Fixed hospitals which has its usefulness in the zone of the interior. A Station Hospital ordinarily receives patients only from the post to which it pertains. In some exceptional instances, it may serve the needs of a circumscribed area, or may be designated to receive special cases from any place without a service command, corps area or other military commands under the control of whose commander it functions. With such a designated hospital setup, we treat no actual battle casualties except those resulting from war games and other processes in preparing men for actual warfare.

You probably know that Fort Knox is a large place and is counted to be the third largest city in Kentucky. Its hospitalization facilities, including the number of hospital beds, is estimated to be as large, or larger, than all the combined hospitals in Louisville. This fact was a revelation to me. Station hospital facilities provide four beds per each one hundred of the military population of the station. The hospitals are usually so designed that they can be readily expanded to provide a total of five or six beds to each one hundred population. This allowance may seem large in comparison to ordinary civilian needs and it may make one think that there is a great deal of sickness in the Armed Forces. On the contrary, the soldiers are a physically select group and

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the present army's health record is good. However, all sick soldiers have to be hospitalized and cannot be treated in barracks or quarters like we frequently do in the home in civilian practice. In military hospitals, we have a perfect control of the patients' actions and we feel they can get well quicker and are not in the way of active troops.

With this preliminary explanation out of the way, I can be more specific with the orthopedic conditions encountered from now on.

Probably the most common disorder which we see many times daily is the problem of weak, sore feet. For the most part, our foot problems come up during the first three months of Army Service, during the hardening process. At that time, the drilling, marching and obstacle courses take up a good part of the soldier's time, and place an extra strain on the feet. Strange as it may seem, a man from the farm regions seems to have more trouble with his feet than do city dwellers. The reason for this occurrence is probably that city dwellers are used to hard streets, and those from the farms use riding machinery and have soft ground to walk on at their work. If these soldiers can continue through 3 months of basic training, their feet will usually accustom themselves in time and the excessive marching and drilling is over at the end of twelve weeks time. If the soldiers have continued feet trouble, we alter their shoes with inside wedges and metatarsal bars. Frequently they are placed on a limited duty status which does not require calisthenics, marches and drilling. Some patients with foot deformities as claw feet, rigid flat feet and others who cannot be fitted with army shoes must be discharged from the service. In general, the soldiers' feet are better shod than at any time during their lives because the shoes are roomy and have excellent leather and rubber soles. All the men are cautioned to wear light, woolen socks and preferably two pair of socks on marches to prevent blistering. They are further instructed to bathe their feet daily with directions to stand in the special foot bath solutions of calcium hypochlorite until they have dried the rest of their body following the bath. The feet should then be dusted with talcum powder.

Of almost equal importance to foot ailments are knee sprains. Uneven ground, trainasium activities, running the obstacle courses and athletic activities account for the greater part of these injuries. As soon as a man comes to a dispensary with a history of knee sprain and there is excessive fluid in the joint, he is admitted to the hospital and made to go to bed. If there is suggestive distention of the joint, an aspiration is done and a flannel bandage is applied together with application of ice packs. After forty-eight hours, hot packs are applied or some form of heat until the swelling has pretty well disappeared. Occasionally plaster splints are applied when pain is severe. All men are instructed as to the use of the quadriceps group of muscles to prevent the atrophy as a result of rest. Taking into account the number of knee sprains, there are but a very few torn semi-lunar cartilages. The majority of cartilage injuries encountered have had previous knee injuries before entering the service and the Army does not feel responsible for anything that has happened before entering military service. Case histories as well as x-rays are necessary in all these knee injuries to rule out any past knee trauma.

The number of hip injuries is very small and it is rare to encounter a fracture of the neck of the femur.

Back injuries are numerous including compression fractures of the lumbar, thoracic and cervical spine. Tanks, half track trucks and other vehicles frequently spill their occupants with resulting back injuries. The ruptured intervertebral disc is encountered very often and a conservative attitude has been maintained toward the care of these cases. If, after continued bed rest and physiotherapy, they do not clear up, then an operative procedure is advised. The usual back strain has a great advantage in the army in that this patient can be placed on a hard, flat bed and be made to rest. After the acute symptoms are over, heat, massage and other physiotherapy measures can be instituted. The results of this conservative type of care are ideal. However, this treatment may be called a radical type of treatment in civilian life because it would take a great many men away from industry and place them in their beds. In the end I believe the number of chronic backs would be greatly reduced by instituting this type of early treatment.

A very important duty of an Army Orthopedist is working in the Out-Patient Clinic. There are regular days for afternoon clinics where men are seen in con-

sultation from their individual dispensaries in the field forces. Here we see the men who are admitted into the service with orthopedic disabilities and they must be reclassified and placed in occupations which they can perform without aggravating their disability. If they have disabilities which are incompatible with the many phases of army life, they must be discharged to civilian life. Arthritic spines, stiff hips resulting from old fractures, Perthes Disease, slipped epiphyses or congenitally dislocated hips are mostly returned to civilian life because of the potentialities of these cases becoming wards of the Veterans' Administration and they are generally unfit for military service. All cases calling for reclassification and discharge from the Army because of orthopedic disabilities are presented to a board of officers who examine and pass on their physical condition. If they meet United States Army regulations for unfitness, they are returned to civilian life usually within two weeks after the board of officers meets.

A large percentage of the orthopedic hospital admissions are fractures. Since January 1st, 1942 there has been a monthly average of 60 fractures admitted to the hospital. This number does not take into account the fractures treated as out patients in the clinics and dispensaries. The most common causes of the injuries are automobiles, motorcycles, tanks, half track vehicles, training activities including the trainasium, obstacle courses, athletic activities, stepping on uneven ground into holes, or on sticks or rocks and lastly bone injuries due to fights and brawls. The dental surgeons usually care for all jaw injuries.

The majority of fractures are simple or comminuted types with only a small percentage of compound fractures. There is an average of only 2.8% which are compound fractures.

Practically all popularly accepted methods of treating fractures are used. However, in fractures of the long bones some type of fixed traction in casts is generally used either with single or double pins in the extremities of the bones. The double pin method of Roger Anderson is very popular. Padded casts are used almost exclusively.

Compound fractures are being treated similarly to those methods used in most first class hospitals in civilian life. These injuries are all treated as emergencies and they have as much preference as an acute abdomen does in the operating rooms. These cases are no longer treated in the emergency room. All ambulances carry splints and when they arrive at the scene of an accident the patient is splinted where he is found. Attendants see that the patient is warmed with blankets during the splinting process so as to allay shock. If there is a compound wound then sterile bandages are applied and if there is much bleeding a pressure bandage is placed. Rarely is a tourniquet used.

On arriving at the hospital the patient's general condition is ascertained and he is treated for shock with sedatives, fluids in the form of saline and glucose and blood. X-rays are made with the splint in place. The preparation of the wound for surgery is done in the operating room after an anaesthetic has been given and where there is ample help and necessary equipment to repair the fracture and to maintain it in a fixed position. All wounds are thoroughly cleansed with large amounts of saline and moistened sponges. The wound edges are draped thoroughly to prevent further contamination of the fracture and soft tissues. A thorough debridement is done excising all damaged tissues and enlarging the wound if necessary in order to examine the depths of the wound. Soiled periosteum is cut away and the ends of the bone are curretted or chiseled off so as to remove any sand or dirt that is ground into the cortex or medullary cavity. The bottom of the wound is inspected for foreign bodies and dirt. Numerous irrigations are necessary to cleanse these contaminated wounds. After the entire operating team is satisfied with the cleanliness of the wound, then the repair can be done. Sulfanilamide is placed in the bottom of the wound and in and around the ends of the bone. The bones are aligned and approximated. A vitallium or stainless steel plate and screws, or screws alone are used to fix the fractures, or the soft tissues are closed around the bones without internal fixation. As much as 10 to 12 grams of sulfanilamide powder are used in the wound depending on its size. The wounds are closed in layers placing sulfanilamide in each layer or the edges may be sutured with thru and thru silk stitches. Double or single pin fixations are applied when necessary and a snug fitting cast is placed. The cast is split down the center to take care of swelling which may occur during the first 24 hours

following the operation. On placing the patient in bed the extremity is elevated to prevent unusual swelling. No dressings are done for two weeks or more until the stitches are to be removed unless the patient shows signs of infection in the wound which can be ascertained by his pulse and temperature. Usually one to two prophylactic doses of gas gangrene and tetanus antitoxin is given in very dirty wounds. As soon as the patient's stomach can tolerate sulfanilamide he is given enough of the drug to keep his blood level between 8 to 10 mgm per 100cc.

At our post vitallium stainless steel plates and screws are used freely in compound and closed fractures with a low morbidity rate for infections. After all plates do not cause infections but it is unclean wounds and useless trauma and handling of tissues that predispose to bone infections.

If a wound is such that it cannot be cleansed completely so that it can be closed primarily then sulfanilamide is placed in its depths; vaseline packing is inserted so as to keep the wound edges apart; steel pins are inserted into the extremities of the bone; and a cast is applied and a window is cut for future dressings.

When fractures are encountered which require many months of treatment and convalescence these cases are moved on to a general hospital when it becomes practical. Fractured thighs, hips and spines fall into this class and when they have been set, operated or casted and can be safely moved we transfer them to a general hospital usually to Billings Hospital at Indianapolis. This transfer allows sufficient beds for acute cases at Fort Knox where there is usually someone who can fill this bed immediately. Any orthopedic conditions which require reconstructive operations and a prolonged convalescence are also sent to general hospitals.

DISCUSSION

Lt. Colonel Walter H. Matuska, Fort Knox: There are two things I would like to stress. One is hospitalization for mild illnesses, because some of the men live in tents, some in barracks and if these minor injuries and illnesses are not hospitalized immediately the army would soon have a group of incapacitated men on its hands, and not be able to function. In the long run to hospitalize them for minor injuries and illnesses is a wise policy for the individual soldier and for the taxpayer. The individual case comes in with a mild sprain, is treated immediately, and there is less likelihood of a chronicity developing. In some cases it takes several weeks to recover from a sprain, which might have been cleared up in a few days if treatment had been started immediately. The same is true of the common cold. We know how many millions of man-days a year are lost all over the country because people are laid up as the result of a common cold. In the Army when a cold is detected the man immediately goes to the hospital, even if it is only a slight cold. These cases are taken in immediately, cleared up and epidemics are thus prevented.

The other point that is interesting is Major Fisher's reference to the C.D.D. Board, Certificate of Disability Board. This board has the duty of weeding out men who have gotten into the Army with disabilities that were overlooked at the original examination. At the Draft Board and the Induction Center the examinations can't be so thorough and these disabilities are found later when they are given a more thorough examination. We find men who have old healed fractures, old injuries of the spine and hip disease that are overlooked. When they get on active duty they are unable to do the work. These men are given a thorough hospital work-up, and then sent before the C. D. D. Board. This Board meets once a week and these cases are studied and those given certificates of disability are discharged from the army. In that way the taxpayer won't have to pay them a pension over a long period of time.

THE SULFONAMIDES IN MILITARY MEDICINE

Walter H. Matuska, Lt. Col., M. C.
Fort Knox

At the Station Hospital at Fort Knox, we have as yet had no real war experience, and thus we have no first-hand knowledge of the kind of results that may be achieved with the sulfonamides in military medicine.

This paper is largely a review of some of the many reports that have occurred in the recent literature, with special emphasis on how the sulfonamides have been used in actual battle areas. No claim to any originality is made.

The Station Hospital at Fort Knox, Kentucky, is a military hospital in the sense that its patients are soldiers, who, in all probability, will later on be engaged in battle areas. We have been using the various sulfonamides in medical and

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surgical cases, but our own experiences necessarily are the same as the experiences in civilian hospitals. We do not have the problems of large numbers of casualties in short spaces of time, of collecting casualties, and of evacuating them, which are a few of the problems that complicate the picture for the Military Surgeon in the field.

We have a very high regard for the efficacy of the sulfonamides, judging from the experiences at Fort Knox in the past two years. The men of the Medical Service have reported dramatic results with the sulfonamides, especially in the treatment of pneumonia and meningitis. In twenty consecutive cases of meningococcic meningitis there has not been a single death, and no complications whatever, and no unfavorable sequellae. One proven case of pneumococcic meningitis recovered completely. 110 consecutive cases of X-ray proven lobar pneumonia, almost all of them with sputum proved by smear to contain pneumococci and treated with sulfathiazole, recovered completely, without any deaths, and with no complications. One patient with streptococcic pneumonia died, and three cases of streptococcic pneumonia developed empyema, from which recovery has occurred. No pneumococcic pneumonia developed empyema.

The G-U Service reports results with gonorrhea, treated with sulfathiazole, that would have seemed incredible to practitioners in the pre-sulfonamide era. The soldier with gonorrhea can literally be kept on his feet, for gonorrhea has been treated as an ambulatory disease with sulfathiazole in other military camps, though at Fort Knox these cases are kept in the hospital during treatment, usually lasting only an average of 6 days. When one remembers that in the War of 1914-1918, seven million man-days were lost by the United States as a result of venereal disease, mostly gonorrhea, one realizes what a difference there will be when an average case can be cleared up completely in a week or less, without taking the soldier away from his duty status, if necessary. At least not for the prolonged period of time that formerly seemed inevitable and almost interminable.

Our experience with the sulfonamides on the Surgical Service also has been very gratifying. It must be remembered, of course, that we get our cases earlier in their illness than we did when we were in civilian practice, and earlier than will be the case under battle conditions, and also, that our age group is more restricted, and thus much more favorable than in civilian life.

Most of our cases of acute appendicitis are operated upon in the first twelve to thirty-six hours after onset of symptoms, and sulfanilamide has not been considered necessary in these cases. Sulfanilamide has been used intraperitoneally in the cases in which the appendix was found to be ruptured, and the course of these patients has been undoubtedly much improved by the use of sulfanilamide locally in the peritoneal cavity, and there is just no similarity at all in the post-operative course of such cases to the prolonged course they would have had in the old days, with the long sieges of drains and dressings and distention and discouragement.

We realize that too many conclusions should not be drawn from a small series of cases, or from any one case, but it might be instructive to relate one particular case. A Major, thirty-nine years of age, who was not brought to the hospital until the sixth day of his illness, and who was critically ill, dehydrated, distended, and having a general appearance suggesting a patient in uremia. His weight was 230 pounds, he had a very generous panniculus, and in general, was the sort of case in which one would have to be very guarded in the prognosis. At operation, we found a ruptured, gangrenous, retro-cecal, high-lying appendix with edematous cecum, and the cecum had a gangrenous area in it. Three hundred cubic centimeters of pus was obtained by aspiration from the pelvis, appendectomy was done, and twenty-five grams of crystalline sulfanilamide was distributed in the peritoneal cavity and in the incision. Rubber drains were placed at the cecum, and in the pelvis. The dose of twenty-five grams was perhaps excessive, but was used because of the patient's size, the advanced state of his disease, and because it was decided to drain the peritoneal cavity. The case was unusually remarkable in that he had none of the numerous complications that might have been expected, did not run a temperature over 100.8° F. by mouth, and made a complete recovery. As noted above, too many conclusions should not be drawn from one case, but we have seen similar results in other cases, both at Fort Knox and before coming to Fort Knox. The average dose of sulfanilamide in the

abdomen should probably not exceed ten to fifteen grams. The only case of appendicitis that was lost in the series of over three hundred consecutive cases in the past two years was a case of ruptured retro-cecal appendicitis with peritonitis that did not have the benefit of the use of sulfanilamide in the abdomen.

The results with compound fractures have been much more satisfactory since sulfanilimide has been used locally in the wounds after they have been thoroughly cleansed and debrided. These patients have all been given sulfanilamide or sulfathiazole by mouth also, complementary to the use of sulfanilamide locally in the wound. Open reductions of fractures have done much better also, and there has not been a single case of infection in an elective open reduction since sulfanilamide has been placed in the operative wound. The sulfonamides probably act largely as a bacteriostatic agent, and they help to tide the patient over the critical period during which his defenses are lowered. That is why they are of such value to the wounded soldier, since they keep down infection during the period after the injury, while a patient is being carried from the battle field and transported to the first-aid station. Then, when the physiology of the body is again approaching normal, the patient is in better condition to win his own personal battle against infection. The early use of sulfanilamide is made possible for the soldier by the fact that sulfanilamide powder and tablets are included in his own individual equipment which he carries with him.

The sulfonamides apparently do not cause much, if any, interference in healing. There was a report of a small series of dogs, in which it seemed that the sulfanilamide placed locally on the stomach wall caused a lessening of the tensile strength of the wound, but other observers have not confirmed this, and clinically in most reports the opinion is that there is no appreciable delay in healing. One observer pointed out that when the granulation of the wound appears anemic, and when it appears that the sulfanilamide is delaying vascularization of the granulating tissues, after prolonged use of the drug, the wound may be stimulated by applying an ointment of 10% sulfanilamide in 2% allantoin, in a suitable base, and he observed that wounds that had been sluggish tended to heal faster after the application of this ointment.

In the Year Book for General Surgery for 1939 there is reported a series of thirty-nine compound fractures in which sulfanilamide was implanted locally in which there was not a single infection, while in another series of open fractures treated without sulfanilamide, 27% showed infection, seven cases had gas, and five needed amputation.

Key has used sulfanilamide locally in a series of two hundred elective orthopedic cases, simply as a prophylactic measure in extensive operations, such as opening the hip joint and the like, and has had no infection, and there has been no evidence clinically of delayed healing of the individual wounds, though many of these operations were carried out in aged individuals.

Wars before the Twentieth Century were characterized by ravages of typhus fever, small pox, typhoid, malaria, dysentery, cholera, bubonic plague, cerebrospinal meningitis and venereal diseases, and then of course, the traumatic injuries, some trivial and some tremendous, caused by bombing and by blasting and by bullets.

The lessons that have been learned from civilian use of sulfanilamide during the past few years have not been lost as far as military medicine is concerned, and the armies of the world are using sulfanilamide powder and tablets as a part of the first-aid equipment of the individual soldier. The wounded soldier himself is being trained to open the package of sulfanilamide and pour it into the open wound. For penetrating wounds it has been suggested that a sulfanilamide pencil be devised, that could be thrust into the punctured track made by a bullet. If the soldier is unable to do so, it can be done by the litter bearer or a nearby companion. Sulfanilamide has been the drug of choice, as it does not tend to cake as do some of the other sulfonamides when sprinkled into a wound or into a serous cavity.

In previous wars greater numbers of men lost their lives as a result of disease than as a result of bullets. It is likely that this will be the first war in which more men will be killed by bullets that one can see than by bacteria that one cannot see with the unaided eye, and this difference may in a large degree be the result of the use of the sulfonamides.

Dysentery has always been the cause of many deaths in previous wars, and it is also a disease to be reckoned with in this war, due to difficulty with water supply and other problems that are a result of

the mobility of modern warfare, and the rapid advances (and in some cases the rapid retreats which we hope are now at an end). However, chemotherapy with one of the sulfonamides, in this case sulfguanidine, has completely revolutionized the treatment and prognosis of bacillary dysentery. Sulf-guanidine appears to be quite as effective in the treatment of bacillary dysentery according to a report by Lyon, as sulfanilamide is in the treatment of some streptococcal infections, or as effective as sulfathiazole is in pneumococcal infections. Sulf-guanidine seems to be equally effective against all strains of the various kinds of bacillary dysentery, and most striking results have been seen in cases of Shiga and Flexner bacillus strains. One may well suppose, in view of this, that sulf-guanidine may become important in this war, possibly in its use in extensive abdominal injuries sustained in battle.

In the treatment of surgical and orthopedic conditions occurring as a result of battles or bombs, the sulfonamides seem to be at least one answer to the surgeon's prayer. Experiences gained from the casualties which occurred during the raid on Pearl Harbor revealed acutely injured patients, treated under pressure, by a small group of American trained surgeons, in a small space, in a brief time, with excellent results. The lessons learned fortified the previous opinion of many surgeons, and others have been helped to learn that there are now available certain adjuncts to therapy of the greatest value which, if widely used, will do much to reduce morbidity and mortality of a wide variety of battle casualties.

At Pearl Harbor Long reports that amputation stumps were seen that were made in a hurry by the guillotine method, and the end frosted over with sulfanilamide crystals, and then covered over with vaseline gauze. Seven weeks later one case was draining serum, all the others had healed completely and were tightly closed. Nine weeks after injury the stumps were ready for an artificial prosthesis. In our mind's eye we can compare that with the last war, where there were periods of protracted suppuration from the amputation stumps, with long physical disability with its resultant mental strain, before the stump was ready for an artificial limb. Parenthetically, it was interesting to note at Pearl Harbor that even though large amounts of sulfonamides were used locally and by mouth toxic reactions were rare, and only one case of probable drug fever was seen. Even though a serious toxicity is infrequent, it is nevertheless advisable that the medical officer be on the alert, for the warning signs of a possible sulfonamide intoxication, such as a sustained fever after a period of normal temperature, decreased white count with decreased polys, skin eruption and the like.

At the Naval Hospital at Pearl Harbor the majority of the compound fractures that were seen were found to involve the tibia or fibula or both. These were thoroughly cleansed, debrided, fractures reduced, wounds sprinkled with crystalline sulfanilamide, covered with vaseline gauze and plaster casts were applied. Sulfathiazole or sulfanilamide were given by mouth for four to ten days. It was found that infection was largely prevented, the bones in the lower leg remained in good position, and evacuation was simplified. Seven weeks later there was no evidence of osteomyelitis of the long bones, and three cases in which there was a mild infection in a joint. These achievements would not have been anticipated prior to the advent of the sulfonamides. Long suggests that prophylactic doses of two or three tablets every four hours be given in all severe cases of crushing injuries in which infection with streptococci or gas bacilli might subsequently occur.

The sulfonamides will probably also come into more general use in burn cases. The tannic acid method of treating burn cases is still favored in military medicine, because of its ease of application when there are large numbers of cases to be treated at one time. In civilian practice Allen and his associates have treated burns by using sterile gauze impregnated with a 20% solution of sulfathiazole in an oxy-cholesterol petrolatum base. This treatment of course is in addition to general systemic treatment with morphine, plasma, debridement of the burned areas, etc. Within forty-five minutes after sulfathiazole has been applied the patient is free from pain, and infection has been minimized by this method, and pressure dressings may be applied over the burned area in many cases. This conserves the patient's plasma and prevents edema.

It should not be supposed that the sulfonamides are to supplant accepted surgi-

cal principles, such as painstaking debridement, thorough washing, frequent changes of gloves and instruments, irrigations with saline, general systemic supportive treatment, etc. Sulfanilamide will not protect against gross contamination of a badly devitalized wound, containing much foreign material, as it is apparently only bacteriostatic against staphylococci, even in concentrations obtainable by local introduction of the crystalline drug in sufficient amounts which, by its bacteriostatic effect, protect against infection by holding the organisms in check until local defensive forces are able to overcome the bacteria.

A report in the Lancet of casualties in the Libyan desert contained information that there was a tendency to use too small amounts of sulfanilamide locally in the wound. An average dose of .1 gram per square inch of wound surface is recommended, but there should be no hesitation to use 20 grams in a smaller wound, if badly devitalized and contaminated. Primary suture of clean wounds is ideal, but in war surgery, primary suture at the time of injury should only rarely be done, unless the same surgeon who puts in the sutures can follow the case thru to its conclusion, which is rarely the case. British experience has been that the wounds that have been cleansed and debrided and sprinkled with sulfanilamide and left open (except sucking wounds of the chest and open wounds in the abdomen) have done better than the wounds that were sutured when first seen.

The following is suggested as early treatment for War Wounds:

(a) 20 Grams of crystalline sulfanilamide into the wound immediately after injury, by the patient himself or by a companion.

(b) On arrival at Battalion Aid Station, the wound is cleansed and excised, by the surgeon, and more sulfanilamide is dusted into the wound. Directions for oral administration are then given by the medical officer, and the drug is started by mouth. Dressings and splints are applied, and patient is evacuated to the rear.

The main problem of wound management in war-time is to get the injured man to the surgeon before multiplication of organisms and invasion of tissues take place. Immediate local use of sulfanilamide goes far toward solution of this problem.

Conclusions

It is too early at this time to prophesy just what place the sulfonamides will eventually occupy in the treatment of war wounds. With the many excellent papers being published on the treatment of contaminated wounds in civil life with these drugs, and the large amount of animal experimentation that has been done, in this country and abroad, on wounds simulating war wounds, it is believed that the following conclusions are warranted:

(1) The sulfonamides have opened up an entirely new approach to the treatment of war wounds.

(2) Although they show promise in the treatment of established infection, their greatest use will probably be in the prevention or lessening of the intensity of infection. If they do nothing more than prolong the period in which wound excision can be done with safety, they will prove of inestimable value.

(3) Local application of the drugs is superior to their use orally, since 75 to 100 times the concentration can be had in the tissues about the wound as can be produced by oral administration. No safe dose by mouth can give as high a local concentration, as a moderate dose locally.

(4) In a powdered form these drugs used locally are bacteriostatic or bactericidal (at least to some organisms) and they produce little tissue reaction unless used in excessive quantities, for a prolonged time, interfere little, if any, in wound healing. There is some evidence that healing is stimulated.

(5) Sulfanilamide is rapidly absorbed from the peritoneal cavity, the blood concentration peak occurring between two and three hours after implantation. It takes 24 hours to get the peak by mouth. Dose intraperitoneally should in most cases be about 1.75 mg per Kilo of body weight, and on the average should not exceed 12 to 15 grams.

(6) As a prophylactic agent, sulfanilamide should be used locally and orally in all contaminated wounds. Some observers are using either of the two drugs alone, or a mixture of sulfanilamide and sulfathiazole, as a prophylactic measure in clean operative wounds, where the operation has been extensive and prolonged.

(7) After infection is established, and especially if staphylococci and anerobes are found in the wound, sulfathiazole should be used locally and orally, or the

two drugs may be used together. We have done that on our fracture cases with excellent results.

(8) Because of vomiting, or following G-I surgery, sulfanilamide may be given by hypodermoclysis in .8% concentration in N. Saline. The soluble salts may be given intravenously.

(9) Sulfanilamide crystals and tablets are made an item of issue to our troops for local and oral use immediately after injury. The swallowing of a few tablets will be a simple matter, but the way in which the wounded man will get the powdered drug down into the depths and crevices of his wounds when they are penetrating in nature or located in inaccessible parts of the body presents a problem. The use of sulfanilamide pencils for sinus tracks made by bullets has been suggested. Other compounds and derivatives of the drug will probably appear from time to time, which will have a greater margin of safety, solubility, etc.

(10) Chemotherapy is not a substitute for adequate surgery. It is a valuable adjunct. As the bombardier reported seriously to his commanding officer when asked whether he had struck his target: "No, sir, my bomb didn't strike the target, but it struck quite adjacent." So the military surgeon should not allow himself or his skills to be replaced by the sulfonamides, but he should keep them always quite adjacent.

DISCUSSION

J. A. Snowden, Winchester: I should like to ask the Colonel if he has ever had a case of gonorrhea where he didn't get any results from the sulfa drugs, and, likewise, pneumonia. I have had some cases of gonorrhea where I didn't get any results, and I have used as high as 45 grains for ten or twelve days, and still the suppuration was just as bad.

Speaking about using a pencil in those open wounds, I wondered if a sulfonamide pencil could be used in urethritis.

Major W. N. Lipscomb: I gathered from the paper that it was his choice to use sulfanilamide directly on the wound, rather than to attempt to give it to the man internally. There seems to be a question whether to give it internally or externally.

Lt. Col. Walter H. Matuska, M. C., (in closing): This question of having a pencil of sulfanilamides made is quite to the point, because I have read in the Journals from war areas that there will be more wounds in inaccessible places in the soldier's body in this war than in other wars. It used to be that it wasn't fashionable to show any wounds that were in the back of the body, but in this war, with paratroops, and so on, it is not considered unfashionable to admit that you have a wound in the back or somewhere inaccessible so the treatment of these penetrating wounds is quite a problem.

The open wounds, apparently work out pretty well with sulfanilamide used locally, but as one may suspect with missiles such as fragments of shells, there will be many penetrating wounds in which sulfanilamide won't penetrate the depths of the wound, when sprinkled on locally, so if something can be devised it will be of great help. I don't know that any sulfanilamide pencil has been devised, but it has been suggested, and it might be possible to penetrate the depths of a wound with such a pencil.

I don't want to leave the impression that if you have 100 cases of gonorrhea that you get 100 per cent cures. I don't believe it would be quite that good, but there has been a great deal of improvement over the old days.

I have not had personal experience in the treatment of pneumonia as that belongs to the medical service. These 110 cases were all pneumococcic pneumonias. Many of these were typed out. Personally I don't know of any failures where the pneumonia was due to the pneumococcus. The sulfathiazole is more expensive, but less toxic. The remarkable thing is that there have been just no complications whatever when the sulfa drug was started early. The three cases in which complications did occur were streptococcic pneumonias. Lately, they have been seeing a large number of atypical pneumonias which are thought to be due to a filtrable virus. In those cases I believe the sulfonamides have been of no avail.

The path to the sanatorium must be made easy for the patient and his family. The social investigation should make this its primary function. It should not be a search for resources to be exhausted before the community assumes the cost. The great majority of cases come from families in the low income groups with little if any savings. Treatment is expensive. Insistance upon the use of all the family resources means impoverishment and they may become community charges for rent, food, and clothing. A family is wrecked. The prospect of this is one of the chief deterrents to early hospitalization and to continued stay until the disease is arrested. Edward S. Godfrey, M. D., New York State Commissioner of Health.

DISABILITY FOLLOWING BACK INJURY

Chas. B. Stacy, M. D.
Pineville

Probably no place in the United States presents such an excellent opportunity for studying spinal injuries as do the Coal Fields of Eastern Kentucky. The anticipated output of the Coal Fields of Kentucky for 1942 is in excess of sixty million tons, representing an income of about one hundred and fifty million dollars and employing approximately sixty-three thousand miners. The seams of coal in that district are rich but not thick—requiring the coal miner to work in close crowded quarters—most of the time in a crouched position with the result that should any of the slate fall from the top, striking the miner, it tends to over-flex the spine with the resulting compression of one or more of the vertebrae. Truly, the fractured spine represents the most important fracture in Kentucky's greatest industry, and the estimation of the disability following such fractures has been quite confusing to the profession—chiefly because of the lack of intimate knowledge of such fractures. This has resulted in a great financial loss to the industry. Fractures of the various bones of the body cause the greatest loss of man hours in industry, being far greater than any other type of injury and fractures of the spine are the most disabling of all fractures both in permanent and temporary disability. Many uncomplicated fractures of the spine have been complicated through mishandling by injury to the spinal cord. In this particular industry of coal mining, I am sure that the fractured spine ranks highest in the cause of disability and probably equalling all other fractures put together. The statement is often made that fractures occurring in industry are the same as any other fracture, but each industry has its own particular fracture problem. From the report of the United States Army, we are hearing much about the March Fracture which is the result of severe strain on the tarsal bones of the foot. In the mining industry, the compression fracture of the spine represents our special fracture problem. A few years ago due to the lack of proper x-ray equipment, many of these fractures were undiagnosed. The patient was improperly treated; and in many instances, he was not treated at all. The result was that both the laity and the profession got a poor impression of such fractures. About the mining centers, we still see many hunchbacks which are the result of collapsed vertebrae from lack of treatment; and if the body of the vertebra did not collapse, the period of recovery and disability was greatly lengthened. Today, however, a large percentage of such permanent disability and deformity can be and is prevented by early diagnosis and proper treatment.

Quoting Dr. Osgood: "After such treatment, disability is rare; and surgical protection of the spine by means of a fusion or bone grafting operation is neither necessary nor advisable." As stated before, if such fractures are not diagnosed and proper treatment not instituted, they rank among the most serious of handicaps for future hard labor. It is generally recognized by orthopedic men that it is the faulty body mechanics thus induced by the fracture and not the fractured vertebra itself which causes the disability. This statement is proved by the observation of many of the old untreated cases of unrecognized compression fractures. The x-ray will reveal nature's attempt to build firm bony bridges across these defects—resulting, almost in every instance, in ankylosis of the injured vertebra. I believe it would be possible to select from a series of roentgenograms of cases the ones who had not received proper treatment simply by the excess callous in the form of spurs and ankylosis of the bones. In spite of this wonderful effort of nature's to repair the damage, the symptoms and disability still persist in these untreated cases. The whole problem is even more clouded in everyone's mind by the fact that a certain percentage of these fractures is complicated by injury to the cord itself, and no more serious accident can occur to any workman than paralysis resulting from a severed cord. Some writers claim that as many as 35% of their fractured spines are complicated by cord injury and paralysis. For a given amount of tissue injury to the cord is far more serious than to the brain substance itself.The attendants of every hospital and the physician in charge dread to see this type of case admitted; as they feel that a great percentage of the cases are doomed to failure in achieving good results. It is not my object in this discussion to attempt to lessen the disability evaluation extended to these

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cases. They are truly objects of pity. It is against such a background that we must ask the physician to see the fracture of the spine that is not complicated by cord injury in an entirely different light. In the mining industry where the compression fracture is most common—representing 90% or more of all fractures of the spine, the number of cases with cord injury is far less than those seen in other series of cases. Kuemmell's disease was originally believed to be the collapse of a vertebra after an injury in which no fracture of the bone resulted. We now believe it to be the result of an undiagnosed fracture which later collapsed. Such cases should be rare with modern methods.

Since diagnosis and treatment are not the purpose of this paper, suffice it is to say that a careful x-ray in the A P and especially the lateral positions will give the correct diagnosis in most all instances. Treatment is essentially hyper-extension with the extension being obtained by a number of different types of apparatus—probably the most convenient being by simply reversing the average hospital bed using the knee rest of the Gatch Frame to hyper-extend the back at the point of fracture. Much discussion is given to Davis' Immediate Manipulative Reduction Treatment with some physicians claiming excellent results but others declaring that it increases the number of cord injuries. Undoubtedly the Davis Treatment can be applied to certain types of fractures. Later the patient is put in a plaster body cast with extension of the vertebra so that the articular facets, the pedicals, and the laminae bear the greater part of the body weight, giving the compressed body time to reorganize and heal. I believe it has come to be recognized that the length of disability can be greatly reduced if it is possible for the patient to be allowed to walk and exercise as early as possible. In fact the best results that have been reported have been by the Boehler Method of treatment. This in its essentials being immediate forcible reduction by hyper-extension and manipulation, the spine being hyper-extended as much as possible, believing that when the anterior common ligament is put on a stretch, it presses the anterior surface of a compressed body back into alignment—helping to restore the normal contour to the body. He advises leaving the cast on for a period of about 12 weeks. Boehler also advocates early exercise. This method in miners has probably given by far the best results with the least disability.

The members of the compensation board who in the end grant the amount of disability are generally laymen and have in most instances been confused in their judgment simply because the profession itself was confused in the estimation of such disability. Also it has been a fertile field for renumeration for the patient as well as the attorney in many instances where law suits for damage were brought against the corporation. It is only by careful analysis of a series of cases that these conditions can be improved.

During my experience in the Coal Fields of Eastern Kentucky, I have had the opportunity to treat many of these fractures; and it is with much interest to the writer that I wish to report a series of 120 of these cases. Many cases I am not able to present are not included in this series as I have lost trace of them, and of course, I do not know the exact end results.

In analysing this series of back injuries in regard to the particular bones injured, it shows that the first lumbar was injured 35 times. More than one vertebra was injured 31 times. The transverse process was fractured 17 times. The 4th lumbar was fractured 11 times, the 12th dorsal, 9 times, the third lumbar, 6 times, the cervical vertebra, 2 times, and other vertebrae, such as the 5th lumbar and the 10th and 11th dorsal vertebra, 9 times. If you will note the table, it shows that the 1st lumbar was by far the most frequently involved. This is due to the fact that most of the flexion of the spine takes place in the upper lumbar and the lower thoracic with the upper thoracic vertebra being well supported by the ribs, and the lower lumber vertebra being protected by the pelvis and the large lumbar muscles.

As for associated injuries 14 or 12% of these cases had severe cord injuries. As stated previously many writers in other industries and especially fractures associated with automobile accidents have reported a far greater percentage of cord injuries than was found in this series. In fact, I am sure that 12% is higher than it should be. As stated at the beginning, I am reporting cases that I have been able to trace; and of course, the ones with cord injury have been easy to follow.

In regard to kidney injuries, there were 3 cases or approximately 3% that had renal damage.

There were 16 or approximately 13% which had fractures of other bones—the

bones of the pelvis being the most often involved.

Another important point in classifying these fractures is to show the type of fractures. In this series of fractures, there were 41 or approximately 34% which showed mild compression. In classifying these fractures, I consider the mild compression to be those cases in which a definite diagnosis was made by the fact that the body was mildly deformed as by a slight wedging or lipping of the vertebra. In many cases the diagnosis would not have been made on the x-ray alone but made on the definite history of the injury plus tenderness over the affected part. As for the disability of this type of fracture, there should be about 8 weeks or less of temporary disability with no permanent disability resulting. Twenty cases or 17% showed moderate compression. By that, I consider the vertebra to have been decreased at the anterior border to approximately half or less of its normal size. These cases require treatment in a cast for about 90-100 days with the patient being able to return to work in 6-8 months. In this group of cases with proper treatment, the permanent disability would probably be about 10 per cent or less. Cases, of course, will vary, but I do not think they would far exceed that as an average. Thirty-eight cases or 32% showed severe compressions. It was in this group of cases with the compression and the comminution and in many instances associated with dislocation that the cord injuries occurred. Those cases that did not show cord injury, of course, required a longer period of immobilization by cast and a greater length of time before the cast was applied, and probably more disability of a permanent nature resulted. Two cases or approximately 2% were cervical fractures. Seventeen cases or approximately 14% were fractures of the transverse process alone. Fractures of this type should not cause any permanent disability whatever, and no case has been observed in this series that did not return to work. Two cases or 2% showed small chip fractures.

As far as the disposition of these cases is concerned, 15 or 13% were given complete disability. Fourteen of these cases were the result of cord injury with paralysis. Our results have been very poor with all cord cases. Many cases were referred to orthopedic and neurological surgeons—laminectomies being done in some instances by them or by the writer, but the results have been universally poor. On the basis that these cases are practically always complete losses from a disability standpoint, the laminectomy is probably justifiable as a rescue measure in a large number of cases; but removal of the lamina is a poor orthopedic procedure. In fact in many clinics even when laminectomies are being done for the removal of ruptured nucleus pulposus a bone graft is done in a good percentage of the cases to prevent the unstable spine. Salzman reports a series of cases which showed 8% having cord injury. I believe that they are more nearly correct for the reason given above. One fatality in this series was due to renal complication. Of these 120 cases, 17 or approximately 14% are still under treatment. Eighty-eight cases or 73% have returned to work. With the exception of the ones completely disabled due to cord involvement and the ones that are under treatment, there is not a case in the series that has not returned to work. In practically every instance they are doing their normal work with no decrease in their earnings and few subjective symptoms. Some, due to senile conditions, are in protected jobs, but they would be in this same type of work if there had never been an injury to the spine. Many cases have received large percentages of disability and pay for same only to return to their usual job.

In conclusion, I wish to state: 1. That it is evident that most fractures of the spine in the miners are the compression type involving the upper lumbar region where flexion of the spine is greatest. 2. That 12% or less have cord involvement or some associated injury resulting in complete disability. 3. That the worker having the simple compression fracture returned to his usual occupation. He may have a few subjective symptoms but very little if any permanent disability.

DISCUSSION

E. M. Howard, Harlan: As Dr. Stacy has said, it is very hard to get braces off. A brace is something to keep on and wear right along. Instead of putting braces on them, we put on what we call a bee-gum cast, a cast from the upper part of the pelvis to the armpits, and have it placed on there while the patient is lying with his feet on one table and his head on another, face downward. You get it on snugly and it is very comfortable. Let him wear it for five or six months. If for any reason it is uncomfortable, we take it off and put a new one on, but we let him wear it about

five or six months. Then when we take the cast off they are well satisfied to leave it off.

Charles B. Stacy, (in closing): The time for the removal of the cast in compression fractures depends upon the type of fracture. In mild compressions probably 50-60 days is sufficient time for the cast to be kept on. In moderate compressions 90 days is about the average length of time. In severe compressions with probable comminution of the bone, I firmly believe it should be kept on for a period of 120 days or longer. Of course, each case is followed according to the symptoms. I am aware that many orthopedic men advise the use of the Taylor Brace after the cast has been removed. In the mining industry we are probably a little hesitant in using the Taylor Brace. It has its advantages in helping the patient, but it is a difficult thing to get the miner to leave it off once he has started using it. I believe that most surgeons in the mining district will agree with that.

Regarding the late collapsing of these injured vertebrae, it has been our experience that this rarely happens, in fact not one case was seen in this series, and I believe it rarely happens in practice if the case has received the proper treatment. As a diagnostic point, many claim that the intervertebral disc does not rupture in the fracture of the spine and that destruction of the disc is evidence of an infectious process and not of an injury. Salzman of the Boehler Clinic showed by autopsy that even in the mild compression fractures, the disc was injured in 30% of the cases and that it was injured in a far greater percentage of the cases in the more serious ones. Undoubtedly, Salzman has presented the greatest number of cases with case analysis of any clinic in the world.

The temporary disability in these cases will also greatly depend upon the degree of compression, the age of the individual, the weight, and the personal factor that is present in each case. The mild cases, in general, will return to work relatively early. The moderate compressions will probably require 8 months or 1 year to return to work. The severe compressions without cord injury may require 12 to 18 months before returning to work. Several of the cases in this series did receive large percentages of permanent disability and are now in the Armed Forces and getting along alright. This series of cases has been of much interest to me as this kind of fracture does cause more trouble in the mining industry than any fracture that we have. I would have been glad to have showed a larger series, but I did not have the time to contact the cases personally. If the general practitioner comes to understand the fractures of the spine, the industrial organization will benefit greatly by it, the patient will receive better treatment, and the physician will get more joy from handling the case.

COLLOIDAL GOLD REACTION OF SERUM FROM PATIENTS WITH DISEASE OF THE LIVER

HERBERT L. CLAY, CAPT., M.C.,A.U.S.
Louisville

The primary principles involved in the colloidal gold reaction are very similar to those involved in the cephalincholesterol flocculation reaction. There has been a great deal of investigation done concerning this reaction and it is generally agreed that the albumin fraction of the serum protects against precipitation of colloidal gold whereas the globulins and more particularly the euglobulins cause the precipitation of colloidal gold. It has been shown that qualitative and not quantitative changes are responsible for this precipitation.

In hepatic disease there is an alteration in the plasma proteins, particularly the euglobulin fraction. It is known that the euglobulin plays an extremely important part in the colloidal gold reaction and also in the cephalincholesterol flocculation test. Perhaps the same euglobulin causes a positive reaction in both of these tests and for this reason we studied the following series of cases. We made both determinations on the same samples of serum from patients with liver disease.

Gray in 1940 described the use of this test in cases of liver disease and we have followed his method as published in The Archives of Internal Medicine. However, in his mimeographed directions he states that 10-20 normal sera should be used as controls on each new colloidal gold solution. Mateer, in his work published in the American Journal of Digestive Diseases, January 1942, standardized his colloidal gold solution by using a normal serum and adjusting the acidity until a normal serum gives a negative test yet a known positive serum gives a positive colloidal gold curve.

METHODS

The colloidal gold solution is prepared and acidified in accordance with Klaas's modification of Patterson's method, as used routinely in the serology laboratory of the University of Chicago Clinics. The

Read before the Jefferson County Medical Society, April 19, 1943.

amount of fiftieth-normal hydrochloric acid to be added to the colloidal gold solution is determined with alizarin red as indicator and is checked further by control tests with serums from normal persons and with "known positive" serums from patients known to have hepatic disease. The sensitivity of the reaction may be increased or decreased by increasing or decreasing the acidity of the solution. Standardization need be done only once for each supply of colloidal gold prepared, since several liters may be kept for as long as two months without changing the acid requirement. Immediately before each test is performed acid is added drop by drop, the solution being constantly agitated. Usually from 1.1 to 1.7 cc. of fiftieth-normal hydrochloric acid is needed for every 50 cc. of colloidal gold used. The ph is usually about 7, varying with the individual preparation.

Immaculately clean glassware should be used throughout the procedure.

Five cubic centimeters of venous blood is obtained from the patient before breakfast and centrifuged; 0.1 cc. of clear serum is removed and diluted 1:350 with physiologic solution of sodium chloride. In the first of a series of ten tubes is placed 1.8 cc. of a 0.3 per cent solution of sodium chloride. Then 0.2 cc. of the diluted serum is added to the first tube of the series. The contents are mixed, and 1 cc. is then transferred to the second tube and mixed. This procedure is followed throughout the series of ten tubes, and 1 cc. of the mixture in the last tube is discarded. Five cubic centimeters of acidified colloidal gold solution is added to each tube, and the readings are made after 12 to 24 hours.

In reading the test the same numbers are used as in reading the regular Lange reaction: 0, red; 1, red-blue; 2, orchid; 3, blue; 4, light blue; 5, colorless.

The greater the precipitation of the colloidal gold the higher the numbers; 5 represents complete precipitation. The positive reaction is similar to the dementia paralytica type of curve obtained with spinal fluid, for example, 5532100000 or 5432100000.

Results

(1) Catarrhal Jaundice: The colloidal gold reaction was positive in testing the serum of seven patients with catarrhal jaundice. The serums were tested at various stages of the illness and the diagnosis was based on the history and clinical findings. No biopsy or autopsy studies were obtained in this group. The cephalin cholesterol flocculation test was also positive on the serum of all 7 of these patients. Fig. 1.

(2) Cirrhosis: Seven cases of atrophic cirrhosis were studied and the colloidal gold reaction was positive in all seven of these patients. Positive flocculation tests were noted in 6 of these 7 cases. One case of hypertrophic cirrhosis was studied and found to have a negative colloidal gold reaction but did have a positive flocculation test.

(3) Chronic Cholelithiasis: Four cases of chronic cholelithiasis were studied and the diagnosis confirmed at operation. Three of these patients were jaundiced. None of these patients' serum showed any flocculation. However, two of the four serums showed a positive colloidal gold reaction.

(4) Miscellaneous Diseases of the Liver: In this group we have included 1 case of sub acute yellow atrophy, 1 case of avertin intoxication, 1 patient with a severe burn, 1 patient with carcinoma of the liver (metastatic), 1 case of severe chronic passive congestion, and 1 case of sickle anemia. All of these patients had positive flocculation tests and positive colloidal gold reactions.

Discussion

Twenty-five patients with liver disease were studied and simultaneous flocculation and colloidal gold tests were made on the serum from these patients. These tests were in agreement in 21 instances or 84.0% of the determinations. The group in which the largest discrepancy occurred was the series of patients with chronic cholelithiasis. All four of these patients had negative flocculation tests but two of these four showed a negative colloidal gold and two a positive colloidal gold reaction. Thus, excluding these four cases from the total series, we find that of the remaining 21 cases the two tests were in agreement 19 times or 90.4% of the time.

The use of this test will probably be limited because of the time involved standardizing the gold etc. In regard to the time involved in making the solutions and actually running the determinations the cephalin cholesterol flocculation test is probably far superior to any of the usual liver function tests in both simplicity and sensitivity.

This group is rather small to attempt to draw positive conclusions from, however, the colloidal gold reaction from these ob-

COLLOIDAL GOLD REACTION IN CASES OF LIVER DISEASE

DIAGNOSIS	No. of cases	Pos. Cephalin cholesterol floc test	Neg. Cephalin cholesterol floc test	Pos. Colloidal gold test	Neg. Colloidal gold test
Catarrhal Jaundice	7	7	0	7	0
Cirrhosis, Atrophic	7	6	1	7	0
Cirrhosis, Hypertrophic	1	1	0	0	1
Cholelithiasis, Chronic	4	0	4	2	2
Yellow Atrophy - Subacute	1	1	0	1	0
Avertin Intoxication	1	1	0	1	0
Severe 3rd Degree Burn	1	1	0	1	0
Carcinoma of Liver - Metastatic	1	1	0	1	0
Chronic Passive Congestion - Severe	1	1	0	1	0
Sickle Cell Anemia	1	1	0	1	0

Fig. I

servations appears to be an excellent test to run in conjunction with the cephalin cholesterol flocculation test when liver disease is suspected.

DISCUSSION

Max L. Garon: Always mindful of the varied types of function which are attributes of the liver, our attention has been directed for a number of years toward those tests which are based upon altered reactions of protein fractions of the blood serum. Earliest was the Takata-ara test and its modification. It was soon learned that this was accompanied by a tremendous factor of non-specificity. A number of modifications of this procedure have not been free of the same disadvantages.

It might be pertinent at this point only to mention several liver function tests based upon principles other than serum protein alterations. Dye excretion tests such as the Brom-sulfalein test; the hippuric acid excretion test and the galactose tolerance test. A very valuable recent addition is the determination of prothrombin blood level following the intramuscular injection of stated quantities of vitamin K. This has been an excellent index of liver parenchymal involvement.

The most valuable from the standpoint of clinical application has been the cephalin-cholesterol flocculation test. The colloidal gold curve, as well as the latter, from a clinical standpoint, indicate alterations or invasions of the parenchymal hepatic structure.

Apparently the colloidal gold test offers confirmation of, rather than improvement upon, the cephalin flocculation test. It is possible, also, that the colloidal gold test may prove to be more sensitive as indicated by the positive curve on two of four cases of gall stones in the face of negative cephalin flocculation. This, however, is pure surmise on my part in that no biopsy studies were made on the liver during the gall bladder surgery.

Should further study indicate that the gold test is more sensitive, it would be a valuable addition to our diagnostic armament aim in a group of diseases that are more often than not very confusing.

Austin Bloch: When the technics of protein analysis have become simpler and cheaper, we shall dispense with a great number of empirical qualitative tests, and shall often know, to our patients' advantage, the plasma concentrations of the several protein fractions, including the globulins of humoral immunity.

George W. Pedigo, Jr.: While I was resident in medicine at the General Hospital we had quite a bit of experience with the cephalin cholesterol flocculation test in liver disease. Dr. Joseph Hamilton was asked to peritoneoscope patients who were found to have a positive cephalin test and through the peritoneoscope he would take a small biopsy of the liver so that the amount of pathology in the liver could be checked against the cephalin test. Many of these patients gave no history of previous liver disease or jaundice, but the early diagnosis of cirrhosis was frequently possible. Furthermore, in the past many patients were admitted to the hospital with gastric hemorrhage and who were found to have a negative x-ray of the gastro-intestinal tract. These patients were usually discharged with a diagnosis of hematemesis of undetermined etiology. Since the cephalin test has been available many of these cases were proven to be cirrhosis of the liver with hemorrhage from ruptured esophageal varices. This being proven by both positive cephalin test and biopsy of the liver.

From a diagnostic standpoint, the newer liver function tests, particularly the cephalin test, have been of great value in making a diagnosis previously overlooked.

BOOK REVIEWS

CLINICAL ANESTHESIA: A Manual of Clinical Anesthesia by John S. Lundy, B. A., M. D., Head of Section on Anesthesia, Mayo Clinic, Professor of Anesthesia, Mayo Foundation for Medical Education and Research, Graduate School, University of Minnesota; Diplomat and Member of the American Board of Anesthesiology, Inc., Member of the Subcommittee on Anesthesia, National Research Council. With 266 illustrations. W. B. Saunders Company, Philadelphia and London, Publishers.

This is one of the most complete and important books recently published. Every physician is concerned with anesthesia, especially medical officers and anesthetists of the Armed Forces.

This distinguished authority at the Mayo Clinic gives, with an exactness that leaves no room for misunderstanding, specific and detailed instructions on how to choose the right anesthetic and how to use it—local, regional, field block, spinal, inhalation, intratracheal, intrapharyngeal, intravenous, rectal, oral, etc.

One of the most important features of this new book is the large chapter on choice of Anesthetic Agents and Methods. This chapter is arranged according to the regions of the body, from head to feet, with the diseases of each region given alphabetically. It tells you just which anesthetic to use in each particular disease and exactly how to use it under the conditions present.

Then there is a chapter on Anesthesia for Nonsurgical Conditions, for relief of pain, etc.; a chapter on Anesthesia in Obstetrics; chapters on Pre and Postoperative Care of the Patient; Venipuncture; Intravenous Therapy, including blood transfusion; Resuscitation; Instructions to Physicians and Nurses; Chemistry of Analgesics and Anesthetics; Dental Anesthesia and of the entire field of anesthesiology.

SEROLOGY IN SYPHILIS CONTROL, PRINCIPLES OF SENSITIVITY AND SPECIFICITY WITH AN APPENDIX FOR HEALTH OFFICERS AND INDUSTRIAL PHYSICIANS: By Reuben L. Kahn, M. S., D. Sc., Director of Chemical Laboratories and of Serologic Consultation Service, University of Michigan Hospital; Assistant Professor of Bacteriology and Serology, University of Michigan Medical School; Major, Sanitary Corps Reserve. U. S. Army; Special Consultant U. S. Public Health Service. The Williams and Wilkins Company, Baltimore, publishers. Price $3.00.

The author who reported the Kahn test twenty years ago, presents new experimental studies on sensitivity and specificity, summarizes the development of knowledge of these two fundamentals of serology, analyzes divergent views and proposes a broad plan for rendering blood tests more dependable. The book deals with the principles of serology, not with technique which is thoroughly discussed in Dr. Kahn's earlier publications.

Blood tests were utilized in the past mainly in suspected cases of syphilis. Today persons are blood-tested if they wish to get married, if they join the Army or Navy, or work in a factory. This large scale use of blood tests has led to the revised serologic approach proposed by the author.

A timely symposium is included which stresses the importance of syphilis control in relation to national defense. Fifteen experts present the subject as it is being dealt with today by the Army, the Navy, and by leading industrial organizations as well as by the Public Health Service and the American Social Hygiene Association.

MANUAL OF INDUSTRIAL HYGIENE: Prepared by the Division of Industrial Hygiene, National Institute of Health, U. S. Public Health Service. W. B. Saunders & Company, Philadelphia, Publishers.

This book is intended not only as a source of information for industrial physicians who must meet the changed conditions in industries converted to war purposes, but also as a guide for those who patriotically volunteer to take the places of industrial physicians who have entered the armed forces of their country and is sufficiently complete to accomplish these ends. The list of contributors is long, each highly specialized in his field.

Part one deals with organization and operation of facilities such as medical, nursing and dental services.

Part two has to do with the prevention and control of disease in industry and is divided in two sections, one medical and one engineering.

Part three takes up the manpower problem with interesting and informative treatment of women in industry, absenteeism and the maximum use of manpower.

It is hoped that this book will obtain a wide reading among all who have to deal in any way whatever with the health problem of war workers, and that it will arouse an awareness among them of the opportunities for usefulness in the production of war material.

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ANNUAL MEETING LOUISVILLE
OCTOBER 4-6, 1943

COUNTY SOCIETY REPORTS

Four County Medico-Dental: The Four County Medico-Dental Society met in regular quarterly session on Tuesday night, May 25, 1943, Marion, Crittenden County, and following supper served by the ladies of the Marion Methodist Church to eighteen members and visitors with the invocation offered by the Rev. J. R. Noland, pastor of the Marion Methodist church, B. L. Keeney, vice-president, in the absence of the President, T. L. Phillips, of Kuttawa, called the meeting to order and proceeded with the regular business. Minutes of the previous meeting were read and approved, and the Secretary read a communication relative to doctors setting an example in the saving of waste fat.

The program for the night's meeting had been arranged by Dr. T. Atchinson Frazer, who introduced the first speaker, Major S. Cohen, M. C., Camp Breckinridge, who gave an interesting and helpful discussion on Meningococcus Infection. Upon motion general discussion of the subject was postponed until after the presentation of the next subject by Capt. Wm. F. Boukalik, M. C., Camp Breckinridge, who discussed interestingly and helpfully Pulmonary Atelectasis. A round table discussion followed and valuable points were elicited.

In addition to Major Cohen, Capt. Boukalik and the pastor of the Methodist Church, Rev. Mr. Noland, the following physicians were in attendance: T. Atchinson Frazer, C. P. Moseley, D. J. Travis, G. E. Hatcher, J. O. Nall, W. C. Haydon, E. N. Futrell, Capt. John Futrell, M. C., Camp Breckinridge, Ky., Frank T. Linton, L. A. Crosby, W. L. Cash. Dentists: B. L. Keeney, T. W. Lander, C. H. Jaggers, P. J. Frazar, the last named being admitted to membership in the Society. Adjournment was taken to meet again on the fourth Tuesday in August, 1943, in Lyon County with C. P. Moseley, of Eddyville, in charge of the program arrangements.

W. L. Cash, Secretary.

Grant: The regular meeting of the Grant County Medical Society was held at Hotel Donald, Williamstown, Tuesday, May 25th, with Dr. Byrd as host. The Society discussed the Emergency Maternity and Infant Care Plan. Case reports were next in order.

The next meeting will be held in Corinth, June 15, with Dr. Davis, Corinth.

W. Byrd, Secretary.

Henry: The regular monthly meeting of the Henry County Medical Society was held at the Castle Hotel, New Castle, on Wednesday, May 13, 1943, beginning with dinner which was

served at 7:30 p. m. Dr. Maurice Bell asked the Blessing and the President, Dr. G. E. McMunn presided. Members present were as follows: G. E. McMunn, Maurice Bell, F. C. Hancock, R. J. Skidmore, J. C. Hartman, O. P. Chapman, W. F. Carter, A. P. Dowden, A. G. Elliston, Earl Karnes, W. W. Leslie, Owen Carroll.

Guests present were as follows: Dr. and Mrs. P. E. Blackerby, Louisville; Captain and Mrs. D. K. Detweiler, Fort Benning, Georgia; Mrs. G. E. McMunn, Mrs. W. F. Carter, Mrs. Maurice Bell, Mrs. A. P. Dowden, Mrs. J. C. Hartman, Mrs. Owen Carroll, Mrs. A. G. Elliston, Mrs. R. J. Skidmore, Miss Dorothy Warren, Mrs. W. W. Leslie.

Host for the meeting was W. F. Carter. The Minutes of the previous meeting were read and approved while the delicious dinner was being served.

The Secretary called special attention to the date, May 26, at 10:00 a. m., at the New Castle Gymnasium, which had been set for the examination of such crippled children of Henry County as could be submitted for treatment at the State's Crippled Children's Hospital, Louisville.

Owen Carroll introduced the guest speaker, Dr. P. E. Blackerby, Assistant State Health Commissioner, in charge of County Health Work, who gave a most interesting and informative talk on the new program which the Federal Government has undertaken to furnish prenatal, natal and postnatal care of the wives of soldiers, sailors, marines and coast guardsmen and care of the child up to the time it becomes one year old. This medical care is to be done by each state's regular practicing physicians who are graduates of recognized medical schools. Dr. Blackerby explained that all the information on this program was not available at the present time, and, that as yet, he did not have for distribution the necessary application forms which are to be signed by the wives of Service Men receiving the service, and also, by the attending physicians as well, but as soon as possible, such forms would be sent to each County Health Officer for distribution. Dr. Blackerby's presentation of the information on this new program was received with much interest and enthusiasm as evidenced by the round table discussion following the conclusion of his remarks.

The Secretary reported that the County was now one hundred percent organized, to which announcement Dr. Blackerby gave his hearty congratulations and stated that he would make such report to the State organization with great pleasure.

Mrs. P. E. Blackerby, past President of the State Women's Auxiliary, very graciously accepted the Secretary's invitation to speak for a few minutes on organizing an Auxiliary in Henry County. She gave briefly something of the history, accomplishments and aims of the Auxiliary and it is to be hoped that the Auxiliary will be organized at an early date.

A vote of thanks was extended to Dr. and Mrs. Blackerby for making the trip to New Castle to give the Society such fine inspiration from their excellent talks.

The question as to whether or not the Society would hold meetings during July and August was brought up but it was decided to pass the vote on this matter until the June meeting to which Dr. Chapman would be host.

A vote of thanks was extended Dr. W. F. Carter for the entertainment of the Society and for the program.

There being no further business, the meeting adjourned.

Owen Carroll, Secretary.

Jefferson: The 865th stated meeting of the Jefferson County Medical Society was held Monday evening, May 17, with 47 members and guests present.

The Secretary read the minutes of the previous meeting and they were accepted as read.

The Secretary read a letter from the Waste Fat Savings Committee regarding the importance of salvage of waste fat. Dr. Weeter suggested that the enclosure be posted on the bulletin board and the Committee be written a letter stating that the communication was read at a meeting of the Society.

R. A. Bate of the Necrology Committee read a report of that committee on the death of Dr. Henry G. Hartman. The members stood in tribute during the reading. Motion was made, seconded and passed that a copy of the report be spread in the minutes and one sent to the family.

H. M. Weeter, Chairman of the Program Committee, announced that the second meeting in June will be held at the State Hospital at Lakeland, with a buffet supper at seven o'clock and program afterward.

Hugh R. Leavell said that the number of applicants for the Red Cross Nurses' Aide courses had been reduced below the capacity of the Red Cross for training them and asked the members to do what they can to increase the number of applicants for this work.

Scientific Program: 8:25 P. M.

"Acute Hematogenous Osteomyelitis." Charles F. Wood, M. D.

Discussed by Doctors Margaret A. Limper, Richard T. Hudson, Charles H. Maguire, question by Austin Bloch, and closing remarks by the essayist.

Motion picture, "Blood Plasma" was then shown.

Adjourned 9:45 P. M.

Herman Mahaffey, Secretary

Jefferson: The 866th stated meeting of the Jefferson County Medical Society was held Monday evening, June 7, with 24 members and guests present. The President called the meeting to order at 8:25 P. M. but because a quorum was not present, the business session was not held.

Mr. F. G. Hindsley, Information Officer of Kentucky, O. P. A., spoke on the subject, "Problems of Rationing."

The essay, "Benign Tumors of the Stomach" by Stanley T. Simmons and Foster D. Coleman, was read by Dr. Simmons, and was discussed by Drs. Sidney E. Johnson and Harry M. Weeter.

The President reminded the members of the next meeting which is to be held at Central State Hospital.

The meeting was adjourned at 9:40 P. M.

Herman Mahaffey, Secretary

Jefferson: WHEREAS—By the tragedy of events the life of Doctor Henry G. Hartman, was snuffed in the sixty second year of his life, on Thursday, May 6th, 1943, while in line of professional duty; and

WHEREAS—Doctor Hartman was an esteemed member of the Jefferson County Medical Society, a graduate of the University of Louisville, a beloved husband, father and physician, a cherished citizen of Louisville and a man nobly accepting the duties of life, and shall be greatly missed by the broken ties of dependence and affection; and

WHEREAS—This Society wishes to record its own great loss and to extend its deepest sympathy and affection to the bereaved wife and children, to relatives, patients and friends; therefore be it

RESOLVED—That a copy of these resolutions be spread upon the minutes of this Society and that a copy be sent to the bereaved family.

Oh Christ! who gave Thy Life for mortal man
And suffered on the cross; to Thee; we bring
The cross of mortal man and humbly plan
To lay it at Thy feet a bleeding thing.
As Thou wert resurrected from the dead
So those that dying in the righteous Lord
Have passed from us to Heavenly Life instead.
So rises now the spirit with accord
Of these that standing in meek love beseech
Thy respite for the darlings of his heart
Till all, in Heaven, may perfection reach
And ne'er again that haven e'er depart—
So to Thy Mercy Seat we come, oh God,
In perfect trust of blessing from Thy Rod.

—The Necrology Committee.

Logan: The Logan County Medical Society held a dinner meeting at the Parkview Grill in Russellville on May 20th. Dr. Alice Chenoweth, Director of the Division of Maternal and Child Care, discussed Research Studies which have influenced our newer concepts of Nutritional Requirements in Pregnancy.

E. M. Thompson, Secretary

Perry: The regular monthly meeting of the Perry County Medical Society was called to order by the Vice-president, J. O. Salyers, at 8:05 P. M. May 10th, in the Health Department Offices.

The minutes of the previous meeting were approved as read.

The secretary called to the attention of the Society the card of appreciation received from the Hensley family as a result of the flowers the Society sent to Dr. Hensley's funeral.

The secretary then called to the attention of the Society a letter from the National Civilian Defense Council urging the doctors of the country to set the example in the saving and turning in of waste fats in the home.

Dr. Coleman then introduced the speaker of the evening, Dr. E. S. Maxwell, pathologist and medical technician from Lexington, who gave a really instructive talk and demonstration on Diseases of the Heart. Dr. Maxwell had with him some twenty-five to thirty preserved specimens of human hearts showing the different types of lesions found at autopsy in various cardiac conditions. The demonstration was particularly interesting and very valuable to the general practitioner.

Following Dr. Maxwell's program the members of the Society present entered into a very interesting discussion asking Dr. Maxwell numerous questions pertaining to his lecture and demonstration.

On the motion of Dr. R. L. Collins and the second of Dr. Dana Snyder a standing vote of thanks with applause was given Dr. Maxwell for his being so considerate as to come to Hazard and present such a valuable program.

The following members were present: Drs. Jackson, Collins, Baker, K. N. Salyers, Dana Snyder, Adkins, J. O. Salyers, Kooser, Chandler, Combs, Knoch, Coldiron, S. B. Synder and Coleman. Guests included Mrs. Mary E. Morrison, Mrs. Eliza Shackelford and Mr. Raleigh Johnson. The meeting adjourned at 9:35 P. M.

L. C. Coleman, Secretary.

Shelby: Dr. C. C. Risk was host to the Shelby County Medical Society meeting on May 20. The members and guests met at Dr. Buckner's office at 6:30 P. M. and at seven o'clock were invited to a chicken dinner that was served at the Colonial Inn, Shelbyville.

After dinner the meeting was called to order by President Bell and he turned the meeting over to Dr. Risk, the host of the evening. Dr. Risk introduced Dr. L. H. South, of the State Board of Health and Dr. South in turn introduced Dr. P. S. Pelouze of Philadelphia. Dr. Pelouze spoke on the treatment of gonorrhea. His talk and lantern slides were very much enjoyed and the society deemed itself fortunate in having had the opportunity of hearing Dr. Pelouze.

The following guests and members were present: L. H. South, H. H. Richeson, Louisville; F. W. Caudill, A. C. Overall, Lawrenceburg; L. T. Minish, W. S. Snyder, Frankfort; H. T. Alexander, Crestwood; H. B. Mack, Pewee Valley; Bertha Wiseman, H. B. Blaydes, L. B. Hardman, LaGrange; W. W. Leslie, New Castle; Maurice Bell, A. P. Dowden, G. E. McMunn, Eminence; B. B. Sleadd, Middletown; J. F. Furnish, Taylorsville and Drs. Hayes, L. B. Sternberg, T. E. Bland, W. P. Hughes, W. T. Buckner, A. C. Weakley, W. H. Nash and C. C. Risk, Shelbyville; M. G. Skaggs, T. J. McMurry, Taylorsville; and Dr. Tucker of the State Board of Health.

A motion was made to adjourn. The next meeting being on June 24th when Dr. Skaggs will be the host.

C. C. Risk, Secretary

Union: The Union County Medico-Dental Society met at 7:00 p. m. at Calvert's Restaurant on June 1, 1943, for its annual ladies' night meeting. Following the meal, pictures, "Hidden Hunger" and "Eat Right to Work and Win" were shown. Mrs. O. P. Dyer, Public Health Nurse, and Mr. Sam Moore, Sanitary Inspector, showed the films in the absence of Dr. Bruce Underwood. The meeting was attended by Dr. and Mrs. H. B. Stewart, Dr. and Mrs. C. B. Graves, Dr. and Mrs. W. H. Puryear, Dr. and Mrs. G. B. Carr, Dr. and Mrs. D. M. Sloan, Dr. H. E. Cottingham, Dr. J. W. Conway, Mr. Sam Moore, Mrs. O. P. Dyer.

Bruce Underwood, Secretary.

NEWS ITEMS

Practicing physician at Shepherdsville for forty-seven years, Dr. Samuel H. Ridgway, Sr., died of a kidney infection at St. Joseph Infirmary after a six-months illness. He was a graduate of the old University of Kentucky Medical College, now University of Louisville Medical School.

The Association of Military Surgeons of the United States will hold its 51st annual convention in Philadelphia at the Bellevue-Stratford Hotel October 21-23 inclusive. These three days will assemble doctors from the current war fronts where the United States forces are fighting and from the great base hospitals where rehabilitation of the wounded is in progress.

Dr. Carl Wilzbach, Cincinnati's Health Commissioner, in cooperation with the Academy of Medicine, the Public Health Federation and the Cincinnati Board of Health, will present "Your Health" each Saturday on Radio Station WLW, beginning June 19th at 10:45 Central War Time. It will be in narrative form, interspersed with dramatic sequences, and will contain vital information for a wartime America.

The following physicians attended the New Orleans Graduate Medical Assembly:

Lorenzo H. Adams, Gilbertsville; Isaac A. Arnold, Louisville; B. J. Baute, Lebanon; Benjamin E. Boone, Jr., Elkton; M. A. Coyle, Springfield; J. E. Dunn, Paducah; Isadore M. Garred, Morehead; Clement B. Gettelfinger, Louisville; Wilfred C. Gettelfinger, Louisville; John Evan Johnston, Nortonville; Herman Mahaffey, Louisville; J. A. Mullen, Benham; Edward K. Munn, Jenkins; George H. Wilson, Lexington; J. C. Woodall, Trenton.

BOOK REVIEW

A MANUAL OF CARDIOLOGY: By Thomas J. Dry, M. A., M. B., Ch. B., M. S. in Medicine. Assistant Professor of Medicine, University of Minnesota (Mayo Foundation): Consultant in Section on Cardiology, Mayo Clinic. 310 pages with 80 illustrations. Philadelphia and London: W. B. Saunders Company, 1943. Price $3.00.

This volume fulfills a definite need for a manual that would simplify matters for those who felt the problems of heart disease to be too complex and extensive for them to grasp easily. Various disorders that produce similar disturbances of function and similar objective phenomena are grouped together and features that distinguish these conditions from one another are wherever possible illustrated graphically. Emphasis has been placed on the manner in which symptoms and signs are produced and throughout the manual an attempt has been made to show what reasoning is involved in arriving at a practical diagnosis. The volume is well written and deserves a place in the library of every general practitioner.

WOMAN'S AUXILIARY PAGES

By courtesy of The Journal, following suspension of The Quarterly for The Duration

PRESIDENT'S MESSAGE

Mrs. John B. Floyd, Richmond

The challenge of tests dropped into the laps of the members of the Medical Auxiliary following the horror of PEARL HARBOR is still a BURNING CHALLENGE. We must not fail nor falter.

Can we, all of us, look back with full comprehension upon these past eighteen months of terrible death and destruction, horrible pain, hunger, cold, burning heat, sand, stinging insects and snakes experienced in no miserly measure by our men and women of the Armed Forces? Can we reflect upon the agony of the families of those who have given their All? Can we think of the thousands already maimed mentally and physically, with no hope of normal life for them? Can we face these facts, and say we have done our best? Have we been expendable? As individuals, perhaps, you may think you can say "yes." As an organization, our Auxiliary - what?

Our Armed Forces didn't have eighteen months to decide to realize that life could not be lived as usual. They gave up their organized plan of life, to do as an organization, what was ordered, to make life safe for us at home. For us, they were expendable. Are we worth it? The war is not over by any means. They are still "pitching in" over there—and here. As a Medical Auxiliary, there is plenty for us to do regarding the Defense Health Program.

Organization of the Armed Forces, and Unity of the Allies made it possible to clear the African Theater with quick precision. Continued united effort, at home as well as on the front, will win the war.

As an organized group, we have grave need to strengthen the local Auxiliaries in a united effort to meet the demands of the defense work in our country, especially in the Medical Defense work. Our Woman's Auxiliary is old enough to have many trained women throughout the Commonwealth ready to assume leadership in the field of Health Education, under the direction of our Advisory Council of the State Medical Association. United effort is urgent, and the responsibility should not rest alone on the shoulders of the officers and chairmen. The president can not carry on alone. She needs the loyal working co-operation of the majority of the group at least. It is said that there are always "do-its" and "do-nots" in all organizations. I am hoping that there will be a majority of "do-its" when my successor, Mrs. Octavus Dulaney, takes over in October.

Individual labor in war activities is fine. But, we, as wives and mothers of physicians, already organized into a working body, have a profound duty towards the health in our communities. We should visualize and do, what we best can for what is most needed, serving as faithful patriots in this global war. Let's "pitch in," together, and keep "pitching in" until it is over—over there . . . and here.

Gratifying reports received from some of the Auxiliaries prove that they have been doing good work. I am proud to send their records for our annual report to the American Medical Auxiliary, and take this opportunity to thank all who have reported.

Franklin County Auxiliary initiated a Health Institute under the direction of Mrs. John G. South, a Past President of the State Auxiliary and now, Liaison Officer for the Kentucky State Medical Association and for the State Department of Health. Joined with the Auxiliary in sponsoring this Health Institute were all the organized groups of men and women

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in Franklin County, among these being the Church Auxiliaries, Altar Society and Missionary groups, the American Legion and Auxiliary, the American Red Cross, the Women's Clubs, Rotary, Kiwanis and other Clubs. Representatives of these sponsoring groups attended the afternoon and evening sessions held April 14-16 in the Auditorium of the Christian Church at Frankfort. Members of the Medical Auxiliary attending all these meetings were made eligible, upon the completion of further study and volunteer work, to become members of the Doctors Aide Corps. It is my hope that similar Health Institutes will be held throughout the State during the coming months.

Many members are working with the Blood Donor's Service Registry of the American Red Cross. This is the first time Kentucky has been called upon to donate blood for plasma for the Armed Forces. It is needed urgently. A mobile unit will visit outlying towns for collection, if requested through the local Red Cross Director. The headquarters are at 410 West Jefferson Street, Louisville. Auxiliaries may act as sponsors, under the direction of the Red Cross. The Red Cross has the contract for all the collecting of blood for use of the Army. It is sent to plasma making centers and belongs to the Army from thereon.

My concern is not whether God is on our side; my great concern is to be on God's side.
—Lincoln

We can do anything we want to do if we stick to it long enough—Helen Keller

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But take an active part.

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—Wisconsin Endeavorer.

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PRELIMINARY PROGRAM
TWENTIETH ANNUAL MEETING
of the
WOMAN'S AUXILIARY
to the
KENTUCKY STATE MEDICAL ASSOCIATION
Brown Hotel - Roof Garden
LOUISVILLE
October 4th, 5th, 6th, 1943

Monday, October 4th
9:00 A. M. - 4:00 P. M

Registration Brown Hotel Lobby
(Every woman is requested to register immediately upon arrival.)
Registration and Credentials Committee:
Mrs. Finis M. Travis, Chairman
Frankfort

Monday, October 4th
10:00 A. M.

Brown Hotel - Roof Garden
Pre-Convention Board Meeting—
Mrs. John B. Floyd
Richmond

GENERAL MEETING - OPENING SESSION
2:00 P. M.

Presiding Officer.....Mrs. John B. Floyd
Richmond
Invocation
Roll Call.....Mrs. N. H. Burkhead, Secretary
Owensboro
Minutes of Twentieth Annual Meeting
Mrs. N. H. Burkhead, Secretary
Owensboro
Report of Committees:
Arrangements—
Mrs. Oliver H. Kelsall, Chairman
Louisville
Registration and Credentials—
Mrs. Finis M. Travis. Chairman
Frankfort
President's Report.....Mrs. John B. Floyd
Richmond
Message from Advisory Council
Reports of Officers
Reports of Chairmen
Reports of County Presidents

RECESS
8:00 P. M.

President's Report to House of Delegates—
Mrs. John B. Floyd
Richmond

Tuesday, October 5th
9:00 A. M.

Brown Hotel - Roof Garden
Joint Meeting with K.S.M.A. for the installation of the President of K.S.M.A.

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HEALTH PROGRAM

9:30 A. M.

Dealing with Special War Problems

Presiding Officer.....Mrs. John B. Floyd
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Invocation.....Mrs. Will Walker Ward
Frankfort

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Milton Hopkins, Ph. D., Professor of Botany, University of Oklahoma,
Oklahoma City

Address: Tuberculosis.....Oscar Miller, M. D.
Louisville

Talkie Picture: Tuberculosis and our Colored Citizens.....Lucius Smith, M. D.
Louisville

Tuesday, October 5th

2:00 P. M.

Brown Hotel - Roof Garden

Invocation.....Mrs. Arthur T. McCormack
Louisville

Address: Juvenile Delinquency—
Major General George Scott,
Fort Knox

Panel: War Time Problems in Venereal Disease Control John R. Pate
Louisville

Tuesday, October 5th

8:00 P. M.

Social Entertainment....Louisville Committee

Wednesday, October 6th

9:00 A. M.

Brown Hotel - Roof Garden

GENERAL MEETING - SECOND SESSION

Presiding Officer.....Mrs. John B. Floyd
Richmond

Invocation Mrs. Luther Bach
Bellevue

Report—
Delegate, Woman's Auxiliary, to American Medical Association

Report—
Councillor, Woman's Auxiliary, to Southern Medical Association
Mrs. Philip E. Blackerby,
Louisville

Award of Certificate of Merit to County Having Best Record.....Mrs. E. T. Layman
Elizabethtown

Report of Resolutions Committee

Final Report of Credentials Committee—
Mrs. Finis M. Travis,
Frankfort

Report of Courtesy Resolutions Committee

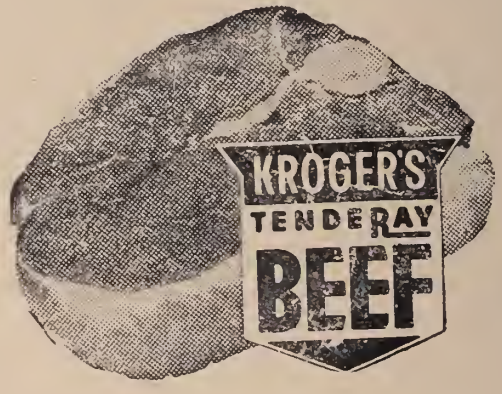
Election of Officers

Installation of Officers..Mrs. George A Hendon
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Adjournment

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Mrs. Eben J. Carey. Wauwatosa, Wisconsin
President of Woman's Auxiliary to the Southern Medical Association
Mrs. Richard H. Clark. Hattiesburg, Miss.
Presiding Officer.....Mrs. John B. Floyd
Richmond
Invocation Mrs. Shelby Carr
Richmond
Message: President, Kentucky State Medical Association
Address Mrs. Eben J. Carey
Wauwatosa, Wisconsin
Address Mrs. Richard H. Clark
Hattiesburg, Mississippi

Wednesday, October 5th
3:30 P. M.
Brown Hotel - Derby Room
Post-Convention Board Meeting
Presiding Officer.....Mrs. Octavus Dulaney
Louisville

Wednesday, October 6th
6:00 P. M.
Crystal Ball Room
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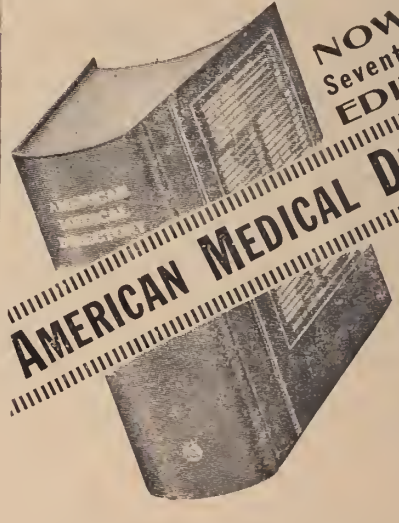
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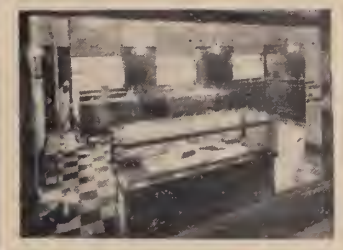
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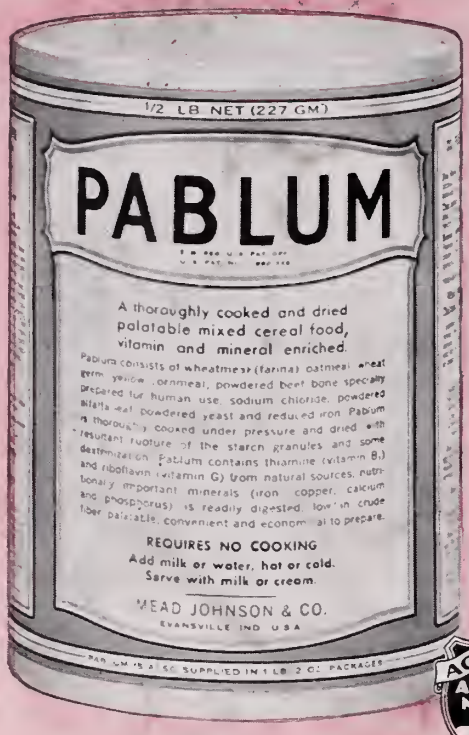
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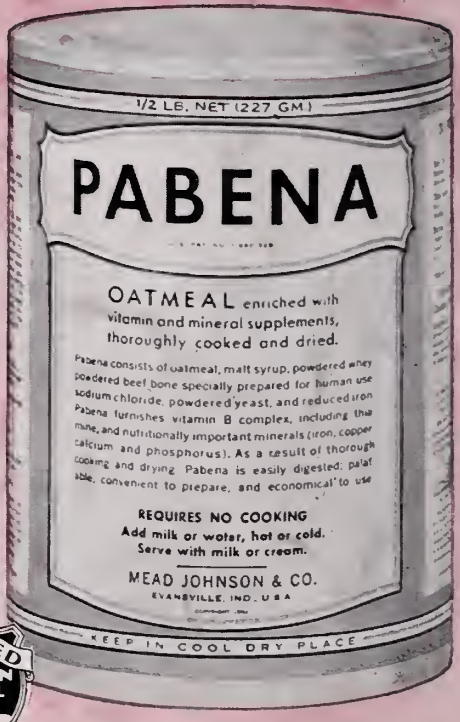
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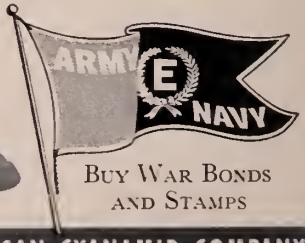
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Ballard	F. H. Russell	Wickliffe	
Barren	C. R. Markwood	Glasgow	August 18
Bath	H. S. Gilmore	Owingsville	August 9
Bell	Edward S. Wilson	Pineville	August 13
Boone	R. E. Ryle	Walton	August 18
Bourbon	George M. Jewell	Paris	August 19
Boyd	R. G. Culley	Ashland	August 3
Boyle	P. C. Sanders	Danville	August 17
Bracken-Pendleton	W. A. McKenney	Falmouth	August 26
Breathitt	M. E. Hoge	Jackson	August 17
Breckinridge	J. E. Kincheloe	Hardinsburg	
Bullitt	George B. Hill	Mt. Washington	
Butler	D. G. Miller, Jr.	Morgantown	August 4
Caldwell	W. L. Cash	Princeton	August 3
Calloway	J. A. Outland	Murray	August 5
Campbell-Kenton	Robert L. Biltz	Newport	August 5
Carlisle	E. E. Smith	Bardwell	August 3
Carroll	H. Carl Boylen	Carrollton	
Carter	Don E. Wilder	Grayson	August 10
Casey	Wm. J. Sweeney	Liberty	August 26
Christian	H. B. Stone	Hopkinsville	August 17
Clark	W. Carl Grant	Winchester	August 20
Clay	L. H. Wagers	Manchester	August 10
Clinton	S. F. Stephenson	Albany	August 21
Crittenden	C. G. Moreland	Marion	August 9
Cumberland	W. F. Owsley	Burkesville	August 4
Daviess	W. H. Parker	Owensboro	August 10 & 24
Estill	Virginia Wallace	Irvine	August 11
Fayette	Charles D. Cawood	Lexington	August 10
Fleming	Roy Orsburn	Flemingsburg	August 11
Floyd	Robert Sirkle	Weeksbury	August 25
Franklin	E. K. Martin	Frankfort	August 5
Fulton	John G. Samuels	Hickman	August 11
Gallatin	J. M. Stallard	Sparta	August 19
Garrard	J. E. Edwards	Lancaster	August 19
Grant	Wallace Byrd	Owenton	August 18
Graves	H. H. Hunt	Mayfield	August 3
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Green	S. J. Simmons	Greensburg	August 2
Greenup	Virgil Skaggs	Russell	August 13
Hanoock	F. M. Griffin	Hawesville	August 2
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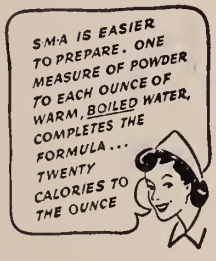
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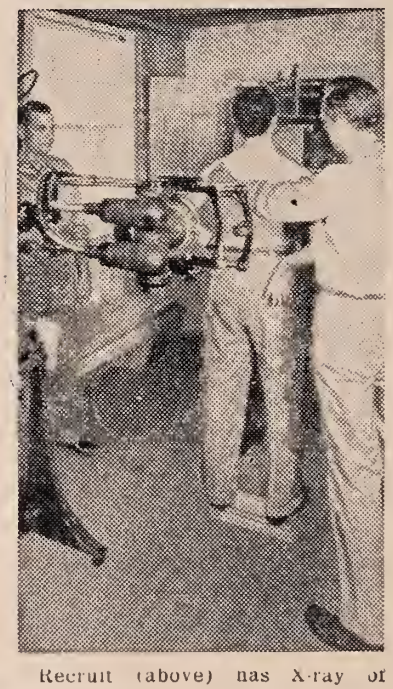
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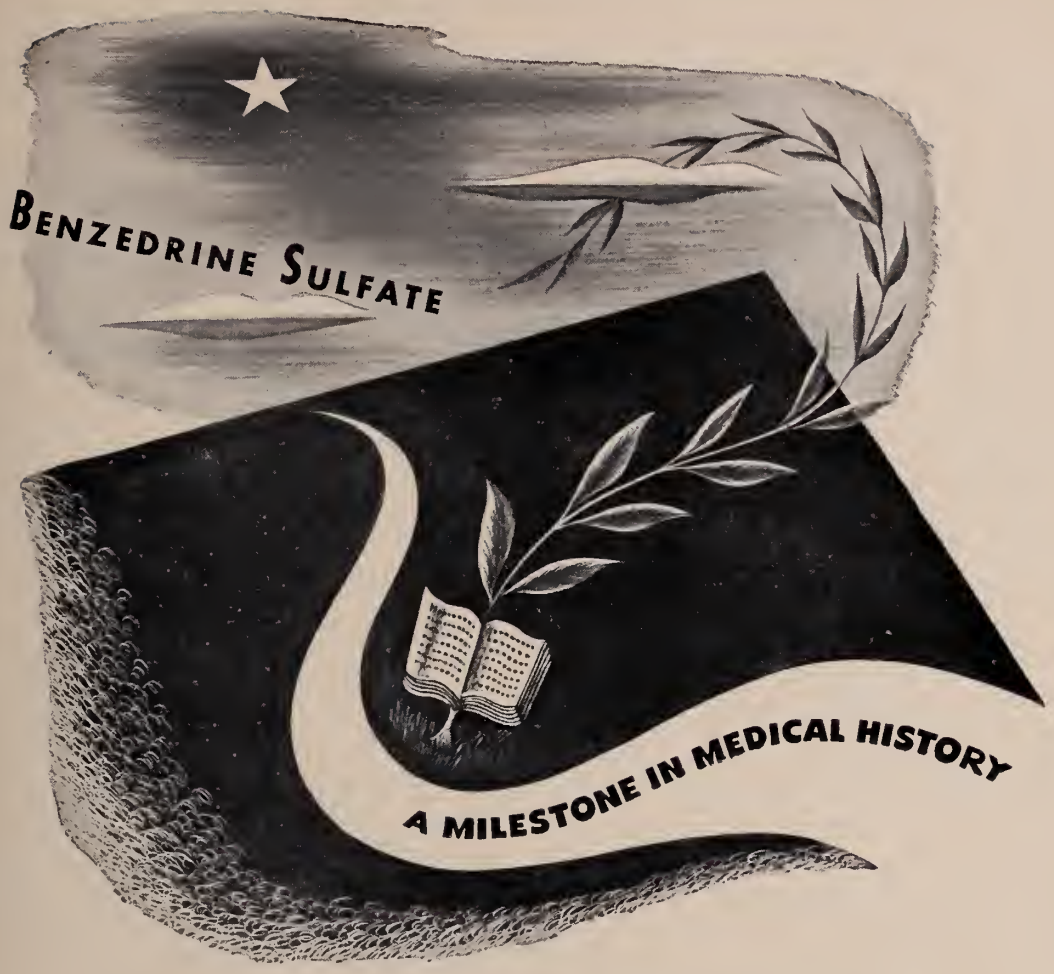
Recruit (above) has X-ray of chest as part of Army's physical examination.

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TUBERCULOUS REJECTEES ARE TURNED BACK TO US. THEY ARE OUR RESPONSIBILITY. EVERY PHYSICIAN SHOULD BE DEEPLY CONCERNED IN HELPING THEM, AND IN PROTECTING OTHERS FROM THEM IF THEY HAVE INFECTIOUS TUBERCULOSIS.

Kentucky Tuberculosis Association



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KENTUCKY MEDICAL JOURNAL

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TENTATIVE PROGRAM

The Annual Meeting, scheduled to take place in the Brown Hotel, Louisville, October 4, 5, 6, will furnish a Postgraduate course for visiting physicians. The program will cover essentially the following:

Burns, Shock and Blood Derivatives; Chemotherapy, Prevention and Treatment of Wound Infections with Sulfanomides; The Treatment of Bacterial Meningitis; Treatment of Gastro-intestinal and Genito-urinary Infections.

The morning session, Wednesday, October 6, will be devoted to topics in General Surgery:

Peptic Ulcer; Gas Gangrene; Intestinal Obstruction; Nucleus Pulposus.

The afternoon of October 6 will be given over to a discussion of the dysenteries, including classification: bacillary dysentery, amebiasis, other intestinal protozoal infections and helminthic dysentery.

The Oration in Medicine will be delivered at noon, Tuesday, October 5, by Dr. Charles B. Stacy, Pineville; Dr. B. Wilson Smock, Louisville, will deliver the Oration in Surgery at noon, Wednesday, October 6.

The members of the State Association are urged to attend this outstanding meeting.

HOTEL ACCOMMODATIONS FOR THE ANNUAL MEETING

Because of the influx of soldiers and their families and visitors from the various nearby cantonments, people coming to Louisville during the recent months have frequently been unable to secure hotel accommodations. The probabilities are that members of the medical profession and their families desiring to attend the approaching Annual Meeting will find themselves in a similar predicament unless they make reservations now. The meeting is scheduled to be held in the Brown Hotel, October 4, 5 and 6. Priorities in reservations for physicians and their families will be given by the hotels, provided the reservations are made by the end of the current month.

Dr. M. G. Buckles, Louisville, Chairman of the Hotel Committee, requests that reservations be made directly through the hotels. If any difficulties are encountered, write him personally.

DAVID YANDELL KEITH

In the passing of Dr. Keith, the profession in Kentucky has lost one of its most outstanding and successful members. Following graduation from the University of Louisville School of Medicine in 1909, and a year's internship in the Louisville City Hospital, Dr. Keith was appointed Instructor in Surgery at his Alma Mater. From that date until his untimely end, he continued in some teaching relationship. In 1916 he took up Roentgenology as a specialty in private practice, and from then on devoted his entire time to this specialty and teaching at the University. Dr. Keith has made a fine contribution in his chosen field and, within the last twenty years, has helped a number of young men to become established in the practice of Roentgenology. No man in the profession has been more generous to his fellows. He will be remembered by his professional associates not only for his splendid ability and service to humanity, but particularly for his many personal services to his fellow physicians.

Dr. Keith was a member or Fellow of the American Radium Society, American X-ray Society, American College of Radiology, the Radiological Congress of 1933, the American Medical Association, the Southern Medical Association, the Kentucky State Medical Association and the Jefferson County Medical Society. For many years, he served on the staffs of the Kentucky Baptist Hospital, the Louisville City Hospital, the Norton Memorial Infirmary, the Jewish Hospital, SS. Mary & Elizabeth Hospital and Children's Free Hospital.

It is gratifying to the members of the profession that Dr. Keith's son, now a student in medicine, will be prepared to carry on the tradition of the family.

The sincere sympathy of the profession is extended to Dr. Keith's family.

PHYSICIAN REPORTS SUCCESS IN IMMUNIZATION AGAINST IVY POISONING

Doctor James T. Gorton of Yonkers, N. Y., for many years secretary of The Society of Alumni of Bellevue Hospital, gives the following advice, which he believes will be successful on the basis of experience with over two hundred cases treated over a period of about twenty years in which he was doing general practice. His procedure was to give Fluid Extract of Grindelia Robusta in ten-drop doses three times a day for ten successive days in March. He states that this method produced immunization which remained for at least a year. Many of these individuals took the treatment annually for many years. Doctor Gorton's conclusions are based on the fact that none of them ever developed ivy poisoning.

In the United States Dispensatory, twenty-first edition, referring to Grindelia, it is stated: "It has considerable use as a local application in the treatment of rhus poisoning." It also states that, contrary to the once common belief, Robusta is not the variety of Grindelia commonly used in commercial preparations. This note was found in the Health News of the New York State Department of Health, for June 7, 1943.

In the bulletin of the Georgia Department of Public Health, for June, 1943, relative to poison ivy, it is advised from a practical point that everyone should learn to distinguish this plant; to recognize and avoid it is the surest way of protecting ourselves from those burning, itching blisters that ordinarily result from contact with the juice or sap of the plant.

The symptoms of ivy poison vary from slight redness and itching of the skin to aggravated swelling with extensive blisters. In mild cases, the skin is covered with numerous small blisters.

After contact with ivy, immediately wash exposed surfaces with hot water and soap several times. After drying, sponge with grain alcohol and water—equal parts. If alcohol is not available, use one tablespoon of baking soda dissolved in one pint of hot water. The soda wash is also useful when the rash has appeared. In bathing areas where the skin has been in contact with the poison ivy, however, care should be taken not to wash surfaces which have not been exposed to the poison, or the poison may be spread.

ORIGINAL ARTICLES

SOME TROPICAL DISEASES AND THE PRESENT WAR

David Richard Lincicome, Ph. D.
Parasitology Laboratory
University of Kentucky
Lexington

To prosecute our present national effort, American fighting forces have now occupied various tropical and subtropical parts of the world. The military medical personnel, in order to maintain troops in these areas, have not only had to familiarize themselves with the diagnosis, therapeusis, prophylaxis and control of many exotic diseases unknown to them in peacetime practice, but have also had to prepare troops for foreign duty by vaccination against diseases known to be endemic in the combat zones. Physicians entering the armed services have been handicapped by their lack of knowledge of tropical diseases. The Army Medical School is now conducting a Specialist's Course in Tropical and Military Medicine for men likely to accompany combat units to the tropics. Certain civilians on the faculties of various medical schools are also in attendance. Recently the Department of Tropical Medicine at Tulane University has inaugurated a comprehensive course in Tropical Medicine for civilians who, after completion of the course, will return to their respective universities to give instruction in Tropical Medicine to medical students so that young men entering the military forces will have fundamental background training in this field.

For geographical, economic and political reasons there has been little emphasis placed upon diseases of the tropics in the nation's medical schools. The greater part of this country lies in the temperate zone and only our southern most borders are sub-tropical. Economically we have had little interest or ambition in the tropics; and we have had no extensive tropical empire. Basic training and post-graduate work in this field has been available in only a few institutions. By far the greatest activity in American Tropical Medicine has been carried out by the Rockefeller Foundation, the United States Public Health Service and various members of the Army and Navy.

Tropical medicine embraces a wide selection of diseases of manifold etiologies which are most extensively distributed in

Read by title before the Fayette County Medical Society.

hotter climates of the world. Within recent years it has been found that certain of these diseases, heretofore believed to be confined to the tropics, are actually endemic and at times epidemic in temperate zones. Amebiasis, for example, is now known to exist from southern Canada to the tip of South America. Recent studies by Faust (1942) indicate that this disease may be present in as much as twenty per cent of our population. Unpublished observations on the incidence of *Endamoeba histolytica*, the causative agent of amebiasis, among students at the University of Kentucky would indicate that anywhere from ten to fifteen per cent harbor this organism. Physicians untrained in their student days in tropical diseases are usually not acutely aware of their presence in the continental United States.

In past generations certain of these tropical diseases have played a heavy and decisive hand in the outcomes of wars. They have been instrumental in defeating huge armies, conquering great generals, and felling civilizations. In his History of Tropical Medicine, Scott (1942) says, "The soldiers' worst enemy . . . has been at all times disease, not bullets."

The success of our present campaign in the tropics probably depends to an appreciable extent upon how well we are able to recognize, treat, control and otherwise overcome the difficulties of tropical disease hazards. When victory has been secured and men return to their homes there can hardly be any doubt but what we shall witness a great dissemination of disease organisms and spreaders. As a fearful experiment in epidemiology the present war will probably pale what Zinsser so aptly calls "the most gigantic natural experiment in epidemiology," the Thirty Years' War.

It seems, therefore, appropriate to publicize certain tropical diseases which are likely to be of importance in the present national emergency and to draw attention briefly to the roles some of these diseases have played in past wars.

Malaria

In a recent survey of malaria mortality in the United States, Faust and DeBakey point out that there has been a decreased death toll from this disease since 1938. This is an encouraging note if mortality data are a valid index to the amount of malaria present in this country. In view of the present economic and political situation it would seem unwise to assume a complacent attitude toward this disease and relax present control measures. The importance of malaria as a factor in the strategy of the present war and as a public health problem in the years that are to follow the war may be briefly summarized as follows:

(1) Malaria is endemic throughout the year in most of our southern states. Because of this and because large numbers of men from outside the South have been placed in training camps in this region we may reasonably expect an increase in the number of malaria cases. Men coming from outside endemic zones are usually highly susceptible to this disease.

(2) The malarial fevers will unquestionably be one of the major problems encountered by those charged with the responsibility of maintaining the health of fighting men in the field. The experience of past wars has shown that these diseases may be an important factor in the success or failure of campaigns in endemic zones.

(3) In view of the present rapid and frequent air communication between the continental United States, our defense positions in the Gulf and the Carribbean Sea and our forces in South America and Africa, where malaria is rife at all times, we must be watchful to prevent the transportation of mosquito hosts into this country. The accidental importation either by plane or fast destroyer of *Anopheles gambiae* into South America from Africa is a good example of the dangerous results of introducing exotic mosquitoes. A. gambiae, a good transmitter of malaria in Africa, was apparently accidentally introduced into Natal, on the eastern tip of Brazil, from Dakar. When this insect became firmly implanted in the Departments around Natal an epidemic of malaria began which affected some ninety per cent of the population and in which the mortality rate was ten per cent. Control measures were instituted soon afterward by the Brazilian Government in conjunction with the Rockefeller Foundation; almost ten years after its introduction A. *gambiae* is finally under satisfactory control.

(4) Already men at the front are acquiring malaria infections, and are being returned to base hospitals at home and abroad for treatment. When fighting ceases large numbers of men will return to their homes; and some of them will probably bring with them foreign strains of malaria plasmodia. Introduction of he-

terologous strains of these parasites into a largely non-immune or susceptible population will be and should be a matter of concern not only for the medical profession but for all public health authorities, since good transmitting hosts of these parasites are present and are continually breeding in many of these United States.

In the military history of the United States, malaria has been distinguished as an important factor in reducing the efficiency and fighting capacity of our forces. It is stated that in the Civil War malaria was the second most important cause of illness and the third most important cause of death in the Northern Armies. In the Spanish-American War, however, malaria was the most common disease, largely because the theater of operations was in a heavily endemic zone.

In the war of 1914-1918 malaria was of no practical consequence among American troops. Simmons (1940) says the "Admission rate for malarial fevers" among our troops "was 3.7 per 1000, with practically no deaths." But as Simmons has pointed out, this low rate was probably due to the fact that there was little or no malaria in the areas occupied by us. The British Armies in the Balkans and East Africa suffered terrific losses in manpower. Of a complement of some 182,000 men, over 71,000 were hospitalized and 228 died of malaria in the Macedonian campaign of 1916. In East Africa the average strength of the British forces was about 50,000 men in 1917. According to Scott (1942) hospital admissions for malaria ran to the enormous total of over 72,000 with 499 deaths.

Malaria control is a sizeable undertaking even during peace-time. Under war conditions, when troops are on maneuvers, it is practically impossible to eradicate malaria-carrying mosquitoes by destroying larvae or breeding grounds or to protect the troops from the bites of mosquitoes. The malaria problem at the present time is even further complicated because: (1) quinine and atabrine, the two best chemotherapeutics of this disease, are not prophylactic drugs; (2) we have been cut off from our large supply of quinine producing cinchona barks. Quinine and atabrine both are ineffectual against the sporozoites of the malarial parasites and thus do not prevent an individual from becoming infected. However, when taken in so-called prophylactic doses these drugs may delay the clinical manifestations of the disease in infected individuals until such time as the drugs are discontinued; they are thus valuable for keeping infected troops in action until they may be properly treated. Since the natural sources of quinine were cut off when Java fell into the hands of the Japanese we are in danger of a shortage of quinine. According to Schweisheimer (1942) our reserve stock of quinine is estimated at about a two years' supply. The annual peace-time consumption of this drug in the United States has been about 4,500,000 ounces. Recently the War Production Board has requested druggists of America to cooperate with the National Quinine Board by sending in all quinine, alkaloid salts or other cinchona derivatives whether packed or in broken lots. Current comment in the Journal of the American Medical Association recently stated: "So important is the control of malaria to the health of our troops in many of the combat zones that the supply or lack of quinine might well be the determining factor in the winning of the war." Still more recently physicians have been urged to contribute to the National Quinine Pool. The office of War Information has already announced the restrictions placed on the use of cinchona barks and derivatives.

Yellow Fever

The last outbreak of yellow jack in this country occurred in New Orleans in 1905. Prior to this the "Saffron Plague" had taken a heavy toll of lives in port cities such as Philadelphia, New York, Charleston, Boston and cities along the upper reaches of the Mississippi River in sporadic epidemics. The principal transmitting host of yellow jack virus is *Aedes aegypti*, a culicine mosquito which still breeds in abundance in many parts of our southern states.

Yellow fever, although not now in epidemic form in the western hemisphere and absent from the United States, is potentially a serious problem. In recent years, workers of the International Health Division of the Rockefeller Foundation have shown the disease to be present over vast areas of the interior of South America where *Aedes aegypti* does not exist. This "jungle" type is apparently identical with urban yellow fever and can be transmitted by *Aedes aegypti*, as has been demonstrated repeatedly in the laboratory. The great danger to continental United States would be the introduction of the jungle virus into the urban population where *Aedes aegypti* is abundantly pres-

ent. Introduction of the virus either in infected persons or infected mosquitoes might easily be accomplished by frequent and fast communication with endemic zones in South America by air such as exist today.

The presence of jungle yellow fever in Africa, especially in the Egyptian Sudan, presents an hazard to India and other parts of the Orient. The Indian Government in 1936 issued an order prohibiting aircraft from entering British India within nine days after leaving an area where yellow fever is endemic or where the disease has been shown to exist by mouse-protection tests. Exceptions are made where a "certificate of disinsectization" has been already obtained. The governments of India, Iraq and Egypt are much concerned about the spread of yellow jack and have mutually agreed to telegraph each other in the event air passengers are en route from an endemic zone.

As a result of the Pan-American Sanitary Code, Pan-American Airways in 1937 took steps to control the spread of this disease by: (1) requiring vaccination of all flying personnel and (2) requiring a certificate from each passenger stating residence or travel for six days prior to embarkation for the United States. The certificates are carefully checked by quarantine officers.

The control of urban, aegypti-transmitted yellow fever rests with the destruction of suitable breeding places of *Aedes aegypti*. This method is not applicable for jungle yellow fever since the disease is not transmitted by *Aedes aegypti*. Destruction of breeding places for such transmitting hosts as are now known does not seem to be practical in dense jungle. At the present time vaccination is apparently an effective measure in preventing the spread of the virus to cities where it could be transmitted by the yellow fever mosquito. Sawyer (1940) advises vaccination of selected groups of people at strategic points where jungle yellow fever is or will likely occur.

The vaccine at present in use in this country and South America is prepared from a strain of virus known as 17D whose virulence is low and whose antigenic properties are such as to afford complete and permanent protection. All military personnel who will go to or through endemic zones are required to be vaccinated with this strain, so that the armed forces likely to be exposed will be fully protected.

Typhus Fever

There are two types of typhus fever: one, the classical, louse-borne European typhus; the other, the endemic or murine typhus, transmitted by rat fleas. Both are present in the United States. The former has been present for a number of years in peoples of foreign birth living on our Atlantic seaboard as a mild disorder known as Brill's Disease. The latter is widely distributed throughout the southeastern states, particularly Georgia, Alabama and Louisiana. Topping and Dyer (1943) point out that cases of murine typhus have occurred recently in St. Louis, Cincinnati, Washington, Cleveland and Richmond. From this it would appear that murine typhus now has established itself in our midwestern states. Whether murine typhus may become the louse-borne epidemic type is still a matter of question.

Classical European typhus has had a long and colorful career in practically all European Wars up to the present time. During the Thirty Years' War it haunted armies and fleeing civilians, killing countless thousands in one of the greatest onslaughts of diseases history has recorded. The Napoleonic Wars furnish abundant evidence of the terribleness of this disease. Of a magnificent army of nearly half a million men, some few thousand remained after the Moscow campaign of 1812. Typhus, along with dysentery, was the real and powerful enemy of Napoleon, not the Russians.

The first World War saw a horrible outbreak of epidemic (classical European) typhus on the eastern front. It attacked the Serbians first, killing tens of thousands. Toward the end of the war and continuing for a year or two afterwards, when their country was aflame with revolution and the people were hungry, cold and miserable, millions of Russians were attacked and millions died.

Whether this war will re-produce such a tragedy remains to be seen. In the 1941 Annual Report of the Rockefeller Foundation, Fosdick says that typhus may "be expected to spread in disastrous epidemics as the result of conditions imposed by prolonged warfare." Recent reports show increasing foci of infections building up in Spain, the Balkins, Poland and North Africa.

In the last war typhus did not extend to the western front, and our American

troops were not attacked, although they did suffer from trench fever, a related rickettsial disease. We may expect a certain amount of typhus among our troops in the present campaign, since the disease is endemic and epidemic in many theaters in which we are now operating. It is probable, though, that vigilant, thorough and complete delousing of troops plus the use of typhus vaccine will prevent large-scale outbreaks of the disease. Typhus vaccine, although of questionable protective power, is being used among all troops in endemic areas.

Bubonic Plague

Bubonic plague is a bacterial disease of rodents and man transmitted from host to host by rat fleas, chiefly *Xenopsylla cheopis*. This disease, perhaps more than any other, has had a long and terrible history of killing and ravaging the peoples of the earth in mighty pandemics. The first authentic pandemic of this disease began in Pelusium, Egypt, in 542 A. D. From this city of world trade, infected rats were carried to all parts of the then known world. In the 14th Century the Black Death again swept the Earth; this time it began in China and then reached westward across Asia to the Middle East and Europe. In Europe it is said one fourth of the population was destroyed.

In the centuries that followed, large and small epidemics continued to harass Europe, Asia and Africa. In the last decade of the 19th Century still another epidemic sowed the Black Death bacillus throughout the world. Once again it began in China; by 1900 the plague had entered San Francisco. In the first quarter of the 20th Century, plague appeared in New Orleans, Beaumont, Galveston and Pensacola. Within recent years, plague has been found to exist in wild rodent populations in several of our western states. This rodent plague has been termed "sylvatic;" infection of wild rodents probably resulted from contact with infected house rats from the time of the introduction of the bacilli in San Francisco in 1900. Sylvatic plague has now spread to ten of our western states and is apparently extending eastward. *Xenopsylla* cheopis, the tropical rat flea and the best transmitter of the disease from rats to man, is known to have established itself in several midwestern states: Illinois, Iowa, Minnesota, Indiana, Kansas, Ohio and Tennessee.

Today bubonic plague is known to be endemic in the following regions besides the United States: India, Burma, Indo-China, Java, Malaya, China, Africa and South America. There are some indications that in China the disease may be assuming epidemic proportions.

Recently it has been found that the sulfonamide drugs are of some value in combating bubonic plague. This is hopeful in view of the fact the disease has such a high fatality rate. A vaccine has been developed, but it is not known whether it has reliable protective value. Warfare on rats probably constitutes the most satisfactory control measure.

It is not anticipated that bubonic plague will be an outstanding problem in the present war. However, under wartime conditions of crowding of both civilians and troops, a case or two of bubonic plague might precipitate an epidemic, as pneumonic types of the disease do occur and may be rapidly spread by droplet spray from the respiratory tree.

The Blood Fluke Diseases or Schistosomiases

The schistosomiases are caused by helminths (trematodes) which live in the mesenteric veins and radicles draining the small and large intestine and bladder. They are acquired by coming in contact with water containing the cercarial larvae which are developed in snails. It has been said that one reason why Japan has not been successful in striking at China's interior is that her soldiers have acquired Schistosomiasis japonica, one of the blood-fluke diseases extensively distributed along coastal areas of China and along certain river beds. The human schistosomiases are widely distributed over the world: China, Egypt, North, Middle and South Africa, the West Indies and Northern South America. Already our troops have become infected in endemic zones from bathing with water from pools contaminated with cercarial larvae. Recently Blum and Lilga (1943) have recorded two cases of Schistosomiasis haematobia in northern Michigan. Both cases have evidently acquired their infections near Durban, Natal, on the East Coast of Africa, in 1941, and had since come to the United States where the diagnosis was made.

Magath (1942) says that in Puerto Rico and Vieques *Schistosoma* mansoni infects a large number of people. This is impor-

tant to us because we have certain defense positions in these islands. Water for drinking and bathing purposes in these camps is usually drawn from nearby pools or streams. Magath states that most of the streams are contaminated with the cercarial larvae which, upon contact with the skin, enter the body. Water for bathing is usually separated from the drinking water and does not receive as much chemical treatment. Magath has found that the "method of requiring approximately 0.2 parts of chlorine per million of residual chloride in water and a holding time of 30 minutes, will render water safe against pollution with cercariae of Schistosoma mansoni."

There is little likelihood that any of the human schistosomiases could become established in the United States even if introduced on a large scale. The appropriate snail hosts in which the parasites causing these diseases develop, are absent here. However, physicians may be called upon to recognize and treat these diseases in returned soldiers.

Filariasis

Bancroft's filariasis will very likely be transmitted to some of our men in North Africa, Middle Africa, in defense positions in the West Indies, in India, Burma and the Solomons. Wuchereria bancrofti, the etiological agent, parasitizes lymph vessels, nodes and glands, particularly in the groin. In the latter stages of the disease, when the worms become moribund and die, the lymph channels become blocked leading to a stasis of lymphatic fluids in the lower appendages of the body. The limbs swell up, the skin becomes dry and cracked thus favoring the entry of secondary invaders. The scrotum may become greatly distended, and other parts of the body may be involved. There is no known therapeutic; surgery sometimes may be helpful in alleviating the condition.

Filariasis is mentioned in particular because for several years a small endemic focus of this disease has been recognized in South Carolina. If infected soldiers were to return to this country the nematode parasite causing this disorder might become widely distributed owing to the presence of appropriate transmitting mosquitoes (Culex fatigans) in the southern states.

Other Diseases

Dengue fever, although it rarely kills, may become an epidemic disease among both our civilian and military armies. It is a virus disease carried from person to person by the yellow fever mosquito, Aedes aegypti. The disease is prevalent today in all tropical and sub-tropical parts of the world. In the United States it has prevailed since 1824. Since this time it has swept across the southern states in several epidemics, rarely causing the death of anyone but incapacitating many for several days or weeks. In 1922, some million cases occurred in the Gulf states. This disease should be kept in mind as a potential danger at critical times in the factories, ship yards, homes of civilians and in the camps and front line trenches.

The African sleeping sicknesses or trypanosomiases have long been a retarding factor in the growth and development of Central Africa. These diseases are caused by flagellated protozoans called trypanosomes which are carried from person to person by a very annoying, blood-sucking fly (Glossina sp.). Troops in the central area of Africa will undoubtedly experience the annoyances of these insects, and some may become infected with the trypanosomes. The sleeping sicknesses are particularly prevalent in the native population. During the days of the slave trade these diseases were brought to the West Indies and other places in this hemisphere, but fortunately they were incapable of becoming established due to the absence of appropriate transmitting insects.

A large part of our overseas forces will doubtless be exposed to a variety of other tropical disease hazards: Oriental sore, kala-azar, onchocerciasis, tropical heat, bites of insects, poisonous plants and many others.

Summary and Conclusions

The state of unpreparedness with reference to tropical diseases in this country has been due to a lack of emphasis on and presentation of such material in the curricula of the nation's medical schools. The present war has necessitated our active participation in tropical areas of the world where many diseases exist that are not present in the United States. Some tropical diseases, although formerly believed to be confined to the tropics, are present in an appreciable part of our native population. Due to their lack of training, physicians for the most part are not acutely aware of the presence of tropical diseases here, and have not been prepared to cope with these disorders on foreign soils. Steps have been taken to relieve this de-

ficiency in medical education.

Malaria, yellow fever, typhus fever, bubonic plague, the schistosomiases, Bancroft's filariasis, along with dengue fever, the trypanosomiases, Oriental sore, kala-azar and others are pointed out as particular diseases to which American troops operating in the tropics may be exposed. Simmons (1942) says: "When one considers the many regions to be occupied by American troops during this war, it seems probable that sooner or later our forces will be exposed to every known tropical disease."

The present war will doubtless bring about significant changes in the distribution of tropical diseases. Due to rapid and frequent air communication with foreign lands, disease vectors and transmitters may be introduced which may bring new and virulent strains of tropical pathogens. When troops return home from foreign service it is highly probable that they will bring tropical disease organisms new to the United States and/or more virulent strains of those already here. The physician will then be called upon to diagnose, treat and control these diseases.

With the passing of every week the responsibility of the United States in helping to rehabilitate the ruined peoples after the war seems clearer. As war continues, human wretchedness, starvation and death will increase. With such conditions the way is paved for the entry and rapid spread of epidemic diseases, particularly typhus fever. We must, for the sake of our own safety as well as for the alleviation of our fellow men's suffering, be prepared to battle disease with food, medicines and a plan for a positive, secure and enduring peace when this resent holocaust is over.

We have no dependable measures that serve to bring about permanent interruptions of tuberculosis such as drugs, foods or even mechanical precedures. Therefore, our programs must be developed with one ultimate aim, namely the creation of an environment free from tubercle bacilli. In some places this has already been nearly accomplished, and only a short time is needed to complete the work. In other places, little has been done and much intensive work over a long period of time will be necessary. In both places, the fundamentals of control are the same and identical procedures must be carried out. J. A. Myers, M. D., Trans. N.T.A., 1940.

SYMPOSIUM ON VITAMIN C DEFICIENCY

SCURVY

Ben H. Hollis, M. D.
Louisville

Scurvy is a nutritional disorder resulting from a deficiency in the diet of ascorbic acid, also called Vitamin C. The disease is usually remembered as a plague of the old days of sailing vessels, and is apt to be forgotten in our day, when we consider ourselves well fed and consumers of what we term balanced diets, which we believe supply our needed vitamins and minerals.

The value of the juice of fresh oranges, lemons, and limes is recorded by John Woodall, Surgeon General of the East India Co., in his book "The Surgeon's Mate," published in 1617. Voyages to India often required six months or longer, and the mortality from scurvy on these trips was high. Finally, when in 1652 Holland established at the Cape of Good Hope a station for the purpose of supplying fresh fruits, vegetables, and meat, to her ships, the incidence of the disease decreased rapidly. This was the genesis of the city of Cape Town, which was founded because of the demand for what is known today as a single Vitamin, Vitamin C.

On the voyage of the Mayflower in 1620, fifty out of one hundred and two passengers died of scurvy and other causes during the fifty six day passage. Even at that time much was known of the dietetic factors of scurvy but it was difficult to prepare food stuff that would retain its anti-scorbutic properties.

Beer has been recognized as a preventative of scurvy and large stores were carried on shipboard. This frequently required the services of a cooper, and John Alden of Mayflower fame, went on that voyage as a cooper, not as one of the Pilgrim settlers.

In 1630 seven hundred settlers came over in a fleet under the command of John Winthrop and founded the city of Boston. Of this number two hundred died by the end of the year, doubtless the majority of them from scurvy, because when in 1631 another trip arrived with lemon juice. as related by Winthrop, many of those who were ill recovered speedily.

Scurvy in Infants

It is uncommon to see advanced scurvy except in infants, this is due to the limita-

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tion of protective foods in their diets. The condition is not at all rare in children. It is only when such cases are found in our own hospitals that we are brought face to face with the realization that our infant diets, in some cases, are deficient.

This discussion on Vitamin C deficiencies is divided into three parts: its relation to pediatrics, medicine, and surgery. The study of deficiency in infancy is presented because there are more cases, it has been studied more thoroughly, while the study of deficiency in adults in relation to medicine and surgery has not been so well investigated. It is my purpose to call attention to these deficiencies in order to stimulate further study.

Scurvy is more frequently seen in infants between the seventh and tenth months. It is rarely seen in children before the fifth month. Scurvy may occur in breast fed babies if the mother's diet has been deficient in Vitamin C. Human milk contains four to five times as much Vitamin C as cow's milk. It is more common in artificially fed infants because the heat treatment of milk destroys some, or all, of the Vitamin C. Raw cow's milk contains some Vitamin C but not a sufficient quantity to protect the infant against scurvy unless other Vitamin C foods are added to the diet.

In general, infants concentration of Vitamin C in the blood will vary in proportion to the concentration of the Vitamin C in the mother's blood. A deficiency of ascorbic acid has been said to have been recognized in infants as early as the second day. The condition is described as a vague nutritional upset with disturbances in water balance and excessive weight loss. Improvement followed with treatment with ascorbic acid. An infant's diet is usually supplemented now at the age of six weeks and, if the condition warrants, it may be given orange or tomato juice or some synthetic preparation in the first few days of life. If the child is breast fed the mother may be given the ascorbic acid, because she is the one who needs it if she gave birth to a child showing a deficiency. The infant will receive its supply through the breast milk.

Pregnant and lactating women require an additional supply of Vitamin C, therefore it is wise to administer the synthetic preparation or increase the amount of protective food in the diet. As mentioned before, the fetus, acting as a parasite takes ascorbic acid from the mother's blood even to the point of depleting her supply, as it is not stored for long periods in the body the mother should take an additional supply in her diet. This is particularly important during periods of vomiting and during lactation.

Symptoms of Scurvy in Infancy

The symptoms of scurvy develop gradually and insidiously. Following a loss of appetite there develops pallor, irritability and the child resents handling. The pulse rate increases to 150 or more and the respiratory rate increases, but not in proportion to the pulse. The child cries out with pain when the diaper is changed, the skin bruises easily and petechial hemorrhages may be seen. The gums become swollen and if the teeth have erupted, the gums pile up around them. Hemorrhage from the gums is common, they are spongy and may have a purple margin. Subperiostal hemorrhages occur as well as hemorrhages into the joints. Epiphyseal separation is not common and is a manifestation of severe scurvy.

The lower extremities are usually the first involved, with tenderness followed by swelling at the joints. There may be such a limitation of movement that it may appear that the extremity is paralyzed and the condition may be confused with infantile paralysis. The administration of ascorbic acid will relieve the pain in these cases within twenty-four hours.

Orbital hemorrhage giving rise to proptosis is not rare and constitutes one of the most alarming manifestations of the disease. The condition is usually unilateral and not preceded by trauma. Sub-conjunctival hemorrhage is rare and the eyeball is not affected unless the condition has been neglected sufficiently long to interfere with the circulation and nutrition of the eye.

Scurvy is limited usually to artificially fed infants and is caused by lack of education of the parents in the sources and preservation of Vitamin C. The disease is rare in rural communities due to the short interval of time elapsing between the production and consumption of milk. In most rural homes orange juice is not given to babies and even though the milk is boiled, we know that all of the ascorbic acid is not lost.

In urban homes the milk has lost all, or almost all, of its Vitamin C content before it is fed, since it has had to pass through the process of storage, pasteurization, and boiling.

The current practice among pediatricians of adding orange and tomato juice to infants diet in the first few months of life has brought about a decline in the incidence of infantile scurvy.

The manufacturers of prepared infant foods are to be congratulated for their advertising policies in stating on their container labels that the directions for serving should be obtained from a physician. It is during these conferences between parent and physician that the advisability of giving orange, tomato, or other juices, or pure ascorbic acid, should be discussed and the education of the mother in the preparation and preservation of the vitamin in foods.

In April of 1941 a case was reported, by Drs. Hudson, Hutcherson, and Ortner, of a case of scurvy at the Children's Hospital, in a nine months old white female, with severe bony involvement. The child had lived, since birth, on a diet of one small can of Pet Milk a day, diluted and sweetened with Karo. She had had no orange juice, cod liver oil, cereals, or vegetables in her diet. The symptoms had existed for about three months prior to admission and the condition had gradually progressed.

The treatment consisted of 250 milligrams of Vitamin C every day, and small blood transfusions. By six months all symptoms had disappeared and the child was in excellent health. Some improvement was noticed several weeks after treatment started. Blood transfusions are probably the best method of combating the anemia which usually accompanies scurvy.

A history of inadequate diet of protective foods, capillary fragility test, saturation determinations by the test dose method, clinical response to treatment, coupled with oedema, spongy bleeding gums, irritability and pain on movement in the extremities, in a child between six and twelve months of age will usually make the diagnosis of scurvy before the x-rays become positive. The x-ray signs early are difficult to read and it is only after calcium is deposited in the hematomas that the films are easy to read. There is one roentgenographic sign, when present, which is conclusive, and that is the presence of a white line with a zone of rarefaction in juxtaposition to it. The subperiostal hematomas show calcium slowly unless Vitamin C is administered. The presence of calcium in a hematoma is then indicative of a healing state.

Sudden Death in Infants With Scurvy

Case reports of three infants dying suddenly with scurvy show that in all three cases severe bone changes were found; two had hypertrophy of the right ventricle. In none of these cases were there any other cases except the severe scurvy to account for the deaths. The ages of the children were ten months, eleven months, and seven and a half months. The usual causes of sudden death in infancy, such as congenital cardiac malformations, cerebral hemorrhage and sepsis, were absent in these children. No history of antecedent illness was obtained in any of these cases. The ten months old infant was found dead in bed after having been well that day. The eleven month old child died shortly after being admitted to the hospital and on admission did not appear in extremis. The child's legs were distorted, being long with wide shafts. He looked wan and pale. He did not look in extremis and the mother was told that the condition could be treated. Almost immediately, however, the baby's body stiffened, his back arched, and his eyes rolled up. By this time, the clothes were removed and 64 milligrams of caffeine were administered, he was gasping at very short intervals and it was impossible to feel the pulse, the heart sounds were faint. Artificial respiration was administered but without avail.

The diet of all these babies consisted chiefly of milk and cereal, very little or no orange juice had been given. One had had small amounts of canned vegetables. In all the cases Vitamin C was deficient or absent in diet.

Vitamin C Deficiency in Adults

The occurrence of sudden death in adult scurvy has been known since early times. Lind cites a passage from Lord Anson's "A Voyage Around the World" (1740-1744) as follows:

"Indeed the effects of this disease were, in almost every instance, wonderful. For many of our people, though confined to their hammocks, appeared to have no inconsiderable share of health; for they ate and drank heartily, were cheerful and talked with much seeming vigor, and with a loud strong tone of voice; and yet on being the least moved, though it was only from one part of the ship to another and that in their hammocks, they have immediately expired, and others, who had

confided in their seeming strength, and had resolved to get out of their hammocks, have died before they could well reach the deck. And it was no uncommon thing for these who could do some kind of duty and walk the deck, to drop down dead in an instant on any endeavor to act with their utmost vigor. An uncommon degree of sloth and laziness which constantly accompanies this evil (scurvy) is often mistaken for the willfull effect of the patient's natural disposition. This has proved fatal to many, some of whom, when obliged by their officers to climb up the shrouds, have been seen to expire, and fall down from the top of the mast."

Darling in 1914 called attention to the presence of right sided cardiac hypertrophy in several cases of fatal adult scurvy. He remarked about the resemblance of these hearts and beri-beri hearts.

Hess reported in 1917 on the "Cardio-Respiratory Syndrome" in infantile scurvy. This consisted of an increase in pulse and respiration, together with an increase in the base of the heart. The T waves were unusually tall in some electrocardiographic tracings. Erdheim in 1918 reports on the autopsies of 31 scorbutic children dying in Vienna, 21 of whom had hypertrophy of the right ventricle. The more severe the scurvy, the more severe was the hypertrophy. The possibility of B deficiency and anemia cannot be overlooked, but it does appear that Vitamin C deficiency does have some role in producing changes in cardiac function.

It is rare to find clinical scurvy in adults in this country, and the cases usually seen are of the latent, or subclinical type. These are the cases that have periods of deficiency which give symptoms of a mild nature and never develop into typical clinical scurvy.

Vitamin deficiencies in adults, as well as children, are usually of the mixed type, that is, there will probably be a deficiency of the B complex associated with the C deficiency. The physical sign will usually demonstrate a mixed type of deficiency if a careful physical examination is made.

The pathology of the subclinical type is the same and probably the most important change is a functional change in the tensile strength of connective tissue and of the endothelial lining of blood vessels. These effects are usually manifested by small hemorrhages. The hemorrhages are usually manifested as petechiae of various sizes, and distributed on the trunk and lower extremities. They are apt to involve hair follicles, and may be found at times in the scalp. Ecchymoses also occur and are most frequently seen about the knees and ankles. Edema of the extremities is common.

Hemorrhages may occur in the large peripheral nerve trunks, sometimes dissecting the fibres extensively. This is uncommon in children. The symptoms are those of neuritis.

Hemorrhagic gingivitis is a condition seen in subclinical scurvy and may be the only physical fiindings. A careful history may reveal weakness, loss of appetite, tenderness of the extremities, etc.

The gums are typical and begin with hyperemia of the papillae. This is followed in turn by swelling, hemorrhage, retraction, and later ulceration and secondary infection of the gums. As a result the gums bleed easily, the teeth become loosened and may be lost. The condition clears rapidly with proper diet, or the administration of ascorbic acid, 50 to 100 milligrams daily. If local treatment is given the gums the recovery is quicker. This condition of the gums is present only if teeth are present and this fact may cause the disease to be overlooked in babies and endentulous old people.

One British authority used massive doses of ascorbic acid without any dental treatment locally and found that the local inflammation and swelling disappeared after approximately 4 days of treatment. In this country there has been found a definite correlation between the frequency of gingival infections in mental patients and low ascorbic acid blood levels. It has also been reported that a deficiency of Vitamin C is a factor in producing subluxation, pain, in the temporal mandibular area and other dental involvements.

Patients with gastric and duodenal ulcers frequently show a deficiency because of their diet. Since it is recognized that Vitamin C is essential for the healing process then it seems rational that Vitamin C should be added. The intramuscular route appears to be the preferable, since if it is given intravenously and rapidly there is a rapid excretion and loss; and if given slowly and intravenously there is a loss through oxidation.

The relationship of upper respiratory infection and Vitamin C is undergoing clinical observation. It appears that patients are benefited in some instances. The most striking effects have been ob-

tained in elderly people who probably were deficient. Its use in bronchial asthma has met with varying success, it does not appear to influence the frequency or severity in most cases. There are some cases in the literature that appear to have been benefited. It does appear that a person suffering with bronchial asthma requires an increased amount of Vitamin C. This is also true of acute infections, such as pneumonia, influenza, etc.

It has been shown that a deficiency of Vitamin C impairs the healing of wounds and that the administration of the Vitamin orally or parenterally greatly facilitates the healing process in cases where there is a deficiency. A careful check on the diet of patients who are to undergo surgery should be made in order to be sure that the nutritional needs are fully covered. If, after reviewing the history, it appears that the diet has been deficient, a therapeutic dose of 300 to 500 milligrams of Vitamin C should be given daily for at least a period of a week or ten days. After this period of saturation the maintenance dose of 50 to 100 milligrams should be given.

The suggestion has been made, which has not proven itself clinically, that the administration of Vitamin C tends to prevent arsphenamine reactions. In some case reports there do appear some beneficial effects but in severe cases of known susceptibility who were prepared with large doses of ascorbic acid before arsphenamine was administered, there was no apparent help in the reduction of reaction to the drug.

The Clinical Symptoms of a C Deficiency are: Lack of strength and vigor. Constipation or diarrhea. Sore gums, loose teeth. Repeated colds, cough. Heartburn. Digestive and abdominal complaints. Weakness of extremities. Pain in muscles or joints.

The Clinical Signs are: Delayed growth of children. Loss of weight, poor nutrition. Pallor, anemic appearance. Edema of extremities. Subconjunctival hemorrhage. Gingivitis, hemorrhage in gums. Loosening of teeth. Enamel defects, tooth decay. Beading of ribs. Persistent pneumonia. Weakness of extremities. Subcutaneous hemorrhages. Petechial hemorrhage in skin. Prolonged coagulation time.

The recommended daily allowance of 30 to 150 milligrams of Vitamin C may be obtained by the daily ingestion of approximately 2 to 12 ounces of fresh or canned orange or grapefruit juice, 3 to 18 ounces of canned tomato juice, or 7 to 42 ounces of canned pineapple juice. Berries, green peppers, and cabbage are rich sources of Vitamin C. Leafy vegetables, apples, bananas, potatoes, green beans, and peas are fair sources.

The proper canning of citrous fruits and tomatoes does not materially lessen the Vitamin C content. There is considerable loss in the canning of vegetables. Wilting and drying cause a loss by oxidation and enzyme action. Vegetables which are to be cooked should be cooked without water and as rapidly as possible, and should be placed in hot water in order to stop the enzyme action. Frozen fruits and vegetables retain a large part of their Vitamin C content if they are fresh and are quickly blanched and frozen. Thawing decreases the vitamin content so they should be prepared as soon as possible.

We, as physicians, will be asked the question, will the food rationing increase the incidence of vitamin deficiencies and should our patients supplement their diet with vitamin preparations? I feel that we have a real challenge and that we should educate ourselves and our patients in the proper planning and cooking of our food and thus rationing need not limit our diets. There are times when supplemental vitamin intake will have to be resorted to, and we are fortunate in that we have available good sources of these vitamins. Until we have a better knowledge of the absorption of vitamins by the intestinal tract it is permissible and desirable in cases of disorders of the gastro-intestinal system to administer some of these vitamins parenterally. However, it is not right to allow the vitamin content of our food to be destroyed in the preparation and then supplement our diet with vitamin pills.

Germ Killer—A second and more potent weapon against disease germs has been discovered in the mold Penicillium notatum. The new derivative, called penatin, is reported by Dr. Walter Kocholaty of the University of Pennsylvania in Science. Not only is penatin more powerful than penicillin but it is active against disease germs which are hardly affected by pencillin. Of fifty disease-causing and nondisease-causing organisms, not one could resist penatin in dilutions of not less than one to 10,000,000 parts and sometimes in dilutions of one to 400,000,000. Penatin not only stops the growth of organisms but also, though to a lesser extent, kills them.

A PEDIATRICIAN'S VIEW OF VITAMIN C DEFICIENCY

MARGARET A. LIMPER, M. D.
Louisville

My first note is that frank scurvy is an uncommon disease in this community, from the standpoint of the pediatrician. I did not have an opportunity to look up figures, but I compared notes with the residents for the last few years and we are of the opinion that we saw a frank case of scurvy about every nine months in this hospital and in the Children's Hospital combined. An occasional case is seen in private practice. Most of the cases that occur are in the lower income groups, and one or two cases a year are seen in the pediatric clinics of the City Hospital. This speaks well for the dietary supervision given in the Child Health Conferences of the City and County.

The reasons for the development of scurvy are: first of all, lack of knowledge for the necessity of giving vitamins, as perhaps was the case with the child brought in this evening or carelessness on the part of the mother; second, allergy and inability of the baby to tolerate orange or tomato juice. These substances are frequent offenders as far as allergy is concerned. One can't blame the mother for discontinuing orange juice if the child breaks out in rash. Another factor may be that the child regurgitates orange juice, or the baby does not like oranges. I have seen older children, offered oranges, just lick off the surface and never get vitamin C from the orange. In those cases it is necessary to give the crystalline vitamin. Subclinical scurvy is much harder to evaluate.

In 1939, Monot and Dodd in Nashville, which has somewhat similar racial, climatic and economic conditions as those of Louisville, found that approximately 50% of the children of lower income families without specific disease were in somewhat low nutritional state with respect to vitamin C. The percentage was higher in children under three years of age than in those over three, and was higher in winter than during the summer months. They suggested that diets which were simultaneously deficient in calories and several essential food factors, may suppress the typical manifestations of deficiency, despite the low levels of ascorbic acid. The baby brought in tonight looked as if he was suffering from low caloric intake as well as vitamin deficiency. Minot and Dodd found an even higher percentage of low vitamin C levels in a group of sick children.

Leslie Harris in England has found that with the reduction of available vitamin C containing foods caused by the war that infants and children have shown a greater drop in plasma ascorbic acid levels than for adults. All of the children developed evidence of deficiency quicker than adults.

A member of the A. M. A. staff made a guinea pig of himself by putting himself on vitamin C free diet. It took between 3 and 4 months for him to develop a vitamin C deficiency. The deficiency would develop in a child much faster because he has much less vitamin C stored and also because he has a higher metabolic rate—comparatively speaking.

We are more fortunately situated with respect to food than is England, but with rationing of canned citrus fruit juices, tomatoes and tomato juice, and the present wave of rocketing prices of such protective foods as fresh oranges, potatoes and green cabbage, we may expect to see an increase in vitamin C and other deficiencies in the lower income groups. With green cabbage at 15c a pound, oranges 45c to 60c a dozen in Louisville, many families cannot afford to buy protective food at those prices.

Shepherd, Macy, Hunscher and Hummel found definite advantages in nitrogen and calcium retention among well children when fresh orange juice was used as a source of vitamin C rather than crystalline ascorbic acid or a processed orange or lemon preparation. It is well for us to keep this in mind—these products should be given in preference to ascorbic acid when they can be tolerated. Tomato juice is an excellent source of carotene as well as a source of vitamin C. Orange juice has appreciable amounts of thiamin in addition to its vitamin C content. Mashed potatoes lose a lot of vitamin C; potatoes cooked in the jacket retain more. All these are facts that most physicians know but which we are liable not to pass on to families under our care because of lack of time when the mothers come to discuss diets with us.

Maintaining vitamin C during infections is probably even more important in children than in adults. It has been definitely shown in rheumatic fever, even

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without or with a very low fever, during the disease; active phases of and also in childhood tuberculosis, that there is an increased need for vitamin C. These children excrete less vitamin C on the same intake than do normal children. I have had the experience of drawing blood for determining sedimentation rate — if the child has to be held, he will break out in a hemorrhagic rash on the arm—evidently because of an increase of vitamin C in his diet. Whooping cough is probably benefited by the administration of Vitamin C because a hemorrhagic toxin is elaborated by the pertussis bacillus. Whether or not gingivo-stomatitis is associated with low vitamin C level is still not definitely known, but it certainly does not do any harm to give vitamin C in these cases. They are unable to take citrus juices because the acid is extremely irritating to the mucous membranes. The same thing applies to sore throats in children. Many an adult will go ahead and drink the juice because he knows it is good for him. I defy any adult to get acid juice into a child if he has a sore throat. In diarrhea where the diet is limited, the infant should be given vitamin C and B supplements in the diet. Injection of Vitamin C is indicated in childhood in the diarrheas where the child cannot retain vitamin C, as a preoperative measure in pyloric stenosis (mentioned several months ago by Dr. Maguire,) also a preoperative measure in intussusception. Another indication is in fracture because vitamin C does help to promote absorption and assimilation of calcium.

The lesson taught repeatedly in the study of tuberculosis will probably one day be found equally true of other conditions. Basically a bacterial infection, this disease lies dormant only to flare up violently when the barriers raised by adequate nutrition are broken down. Denmark's experience in the last war was a classic example of relationship between food and this disease. A thirty per cent rise in the mortality from tuberculosis occurred in 1916-17; a similar rise was noted in the belligerent countries and in Holland, continuing to the end of the war. In Denmark, however, after a blockade that prevented the export from that country of foodstuffs—chiefly meat, fish, butter, and milk—there was a prompt fall in the death rate. J. A. Johnston, M. D., Henry Ford Hosp., Nat. Parent-Teacher, April 1943.

AN INTERNIST'S VIEW OF VITAMIN C DEFICIENCY

Victor P. Dalo, M. D.
Louisville

It is very important that the general practitioner be able to recognize vitamin C deficiency. Inasmuch as we daily come in contact with some of the milder forms of lack of same. We are all aware of the fact that marked deficiency of Vitamin C produces scurvy, which is manifested by capillary hemorrhages, swollen joints, beaded ribs, loose teeth, swollen gums, spontaneous fracture of bones, respiratory and intestinal infection, anemia, which is specific of Vitamin C, muscular atrophy and paralysis. However, any of these symptoms may be present in mild form and should be recognized.

Bones: The skeletal lesions are commonest in the costochondral junctions, the distal end of femur, the proximal end of the tibia, femur and wrist. The distal humerus and proximal ulna are usually spared. The false motion occurs in advanced cases and probably in even moderately severe cases in the costalchondral junctions of the ribs. The periosteum shows a weakening of its attachment and there is an effort of connective cell tissue to reinforce it. This is most apparent as muscular attachments, periosteal lesions of all degrees are prone to be complicated by hemorrhages, due to the unyielding nature of the bone.

Teeth: In the teeth of adults with scurvy the dentin is seen to be resorbed and porotic.

Gingiva: Lesions of the gingiva occur only when teeth are present and are most severe about broken or deformed teeth. The gums become swollen and boggy and bleed easily. In severe cases of scurvy, they become so large as to hide the teeth and make mastication painful and difficult. Rarefaction of the alveolar bones results in loosening of the teeth.

Muscles: In severe scurvy severe changes occur in the muscles. Fragmentation of the striated fibers and replacement by connective tissue poor in collagen may be seen.

Eyes: In severe scurvy, bloody tumors of the conjunctiva and ecchymoses of the eyelids, and elsewhere about the eyes, may appear.

Skin: The skin is of particular interest because of the frequency of signs of the

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disease there and the clue, such easily observed lesions give to the general state of the patient's vitamin C supply. The lesion of the skin that is characteristic of scurvy is the perifollicular or petechial hemorrhage. This is commonest on the lower extremities or wherever pressure exposes the weakness of the capillary.

Other Lesions: Effusions, often blood stained, are common in the serous cavities. There may be slight edema about the ankles, enlargement of the heart may occur. Circulatory collapse may occur, but is seen only in most severe cases of scurvy. The adrenals atrophy in chronic scurvy as the absorption of the cortical fat and vitamin C progresses. Atrophy of the lymphatic due to a lesser extent of other organs, especially glands of internal secretions, occurs but seems to be due to the general effects of debility.

VITAMIN C CEVATIMIC OR ASCORBIC ACID

A. E. Leggett, M. D.
Louisville

A diffusible crystalloid is a strong reducing agent giving off hydrogen easily by converting itself into an oxidized form, and is probably of fundamental importance in tissue respiration by acting as a hydrogen transport agent. It can exist in three forms: (1) a reduced form, (2) a reversibly oxidized form and (3) an irreversibly oxidized form.

Its presence in the lens and aqueous was first established by H. K. Muller in 1932 and has been confirmed by many investigators.

Vitamin C assumes higher proportions in the crystalline lens than in any other organ of the body varying from 2 mg. per 100 gm, in the rat to 104 mg. in the fish. The value in man is about 30 mg. or from 12 to 20 times the amount in blood serum.

Investigations have determined that (1) Vitamin C is present in a relatively high proportion in the lens and aqueous. In the fully developed lens it is more abundant in the cortex than the inert nucleus. (2) Its concentration in the lens falls considerably with age and very markedly in cataract, in which condition it may disappear entirely.

Its presence in the aqueous which is much higher normally than in the blood or cerebro-spinal fluid, is increased by augmentating the intake, and is decreased in cataract, in aphakia or in the plasmoid aqueous obtained after paracentesis.

In the aqueous of aphakia or cataractous eyes the small amount of Vitamin C present is in the reversible form and not the usuual reduced form.

The relation of Vitamin C to cataract has many supporters, who believe its deficiency precedes and may determine the formation of cataract. Others contend that the loss of Vitamin C is secondary to changes in the lens, probably the nature of a disturbance of glycolysis, or its diminution or deficiency precedes and may determine the formation of cataract.

Bellows has studied the level of Vitamin C in the blood of cataractous patients and found it to be definitely lower on the average than non-cataractous patients of similar social status and age groups, 60 to 80 years.

Since Vitamin C is essential for bone repair or tooth development it seems only logical that it should be of marked benefit in progressive myopia, as all of these conditions are dependent on the calcium metabolism. In reviewing the literature, I fail to find this connection between myopia and Vitamin C deficiency mentioned.

It is interesting to note that Vitamin C has a negative therapeutic effect in nonscorbutic hemorrhage but a flavin called Vitamin P. has been isolated, by Szent Gyorgyi in 1936 which is claimed to have some therapeutic effect. This is active only in the presence of small amount of Vitamin C, further work will have to verify this.

DISCUSSION

Richard T. Hudson: I should like to show the X-rays of the case we reported.

This shows the epiphyseal separation. There is complete separation of the upper humeral epiphyses with much subperiosteal hemorrhage, particularly around the left femur. The child was given a general anesthetic, the arms manipulated, put up in a cast in abduction, and the cast left on eight weeks. This film shows the end results. The epiphyses were replaced and healing took place very satisfactorily. There were no symptoms at all after about three months. The child recovered completely.

Misch Casper: Vitamin C is useful in surgery. It helps greatly in liver cases, especially if a combination of vitamin C and vitamin K is used. Vitamin B is also given. I was wondering, in the baby case presented, whether vitamin B was not also indicated, because vi-

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tamin B aids the metabolism of sugar. Vitamin B is used also in giving glucose intravenously. In many forms of vitamin deficiency one vitamin aids the others. In the bone case, Dr. Hudson needed D as well as C to help in aiding and healing, in the formation of callus, and in union of the fracture. Wounds heal much better with vitamin C.

Since the days of my early practice, which is a long time ago, the giving of large quantities of citrus juices to hospital cases has been used as a general practice. It was recognized very early that there was something about citrus fruits which aided the patient to get well. I sometimes wonder whether, in many cases, the vitamins do not do about as much good as the surgical operation itself.

James Robert Hendon: In connection with vitamin C, and speaking only of adults, let us think for a minute about the New England physician who took a diet completely deficient in vitamin C and noticed slight evidence of vitamin C deficiency after a period of many weeks. I want to emphasize that his diet was completely deficient in ascorbic acid. Again, let us think about a group of patients I see three times a week at the city work house. Those people have subsisted on a diet composed largely of doughnuts, coffee, hamburgers and whiskey for periods of several months to several years. I have made a sincere effort to find evidences of vitamin deficiency, such as the skin and mucous membrane lesions of pellagra, bleeding gums and other signs of avitaminosis C, and I don't see them. Certainly this is the type of patients in which one would expect to find symptoms of vitamin deficiency. This does not conflict however with the statement which has been made many times that the people who need vitamins the most are those least able to afford them.

I wonder how Dr. Hollis made the diagnosis of vitamin C deficiency in the cases he showed us? The lack of vitamin C in a given patient can fairly easily be demonstrated by a simple titration method using the patient's urine. I wonder if that was done in any of the cases we saw?

E. P. Scott: I desire to exhibit this seven months old baby with pseudo-paralysis. The legs had been swollen about ten days. The child seemed restless. Routine X-rays were made, showing periosteal hemorrhage. The child had never had orange juice.

Ben H. Hollis, (in closing): Dr. Casper's remarks about the baby needing other vitamins are very true. I stated that these vitamin deficiencies are usually not single but they are multiple deficiencies. Other vitamins would be helpful. The child would probably benefit on a good diet as well as he would on any vitamin products. I would not want to leave the impression I am an advocate of promiscuous vitamin therapy. I am an advocate of adequate diet. If I could take more time, I could show you conclusively, through blood content of groups of children taken to camps, placed on well balanced diets. The blood was taken every two weeks; there was a gradual increase in the ascorbic acid on nothing but diet alone. Take the case of Dr. Crandon, he wanted to see how much time it would take on an absolute deficiency of vitamin C—how long it would take to show vitamin C deficiency. He had adequate amounts of all the other vitamins. It took him a period of one hundred and some odd days before a biopsy made in his back failed to heal. He had no illness, and had an adequate supply of all other vitamins. It took him a period of about over a month to get his C level down to zero. Maintaining it at zero the rest of the time, it took him half way through his procedure before he noticed petechial hemorrhages in the skin and failure of wounds to heal.

Vitamin deficiencies in people don't come on quickly, there is always a deprivation of vitamins over a period of years.

As to whether these are common or not, they are not so common, but every once in a while one crops up. If we overlook it, we miss something. I am thinking of a dentist's daughter who could have any food she wants. For some reason, it was not allergy. Gastro-intestinal symptoms showed constipation, attacks of nausea, a lot of gas. That girl had trouble with her gums that the dentist could not control. They were spongy and bled easily. She would only have to bite a piece of toast and one could see the rim of the gum margins on the toast.

I am not equipped to do vitamin C determinations. That is a long process. My way is by therapeutic trials. On ascorbic acid, the gums came down, the sponginess left. The dentist said I was able to do more than he could do. I believe that the therapeutic test is the only way around here we can prove our results. There is not a laboratory in town that will attempt titration of urine. To be done properly, the person would have to be fasting, then a therapeutic dose of ascorbic acid given, the urine titrated. It is a quantitative test. If they retain ascorbic acid and it does not come out in the urine, then they are deficient. I would rather go into a person's history, if the diet is deficient, if the history and symptoms coincide, then give ascorbic acid and what other vitamins they need.

SYPHILIS FROM THE VIEW POINT OF THE SEROLOGIST

W. H. Allen, M. D.
Louisville

It is with a great deal of pleasure that I appear before you this evening to consider with you the serological reactions in a disease with which each of you has had some experience, many of you are actively engaged in treating, but with which none of us are thoroughly familiar.

Though special study is being given syphilis today, as through past generations, yet the mysteries surrounding the spirochaeta pallida, its method of attack, its means of invasion and often its resistance to treatment, have never been fully solved. Much progress has been made in the control of syphilis it is true, probably as a result of our effort for an early diagnosis and treatment with the many specific drugs now available, however the challenge of the spirochaeta is still before us, yet not properly answered, and as a result 5.8% of the serological tests for syphilis routinely made in our laboratory last year, were positive. 1.6% of the premarital and .6% of the pre-natal tests were also positive.

It is therefore quite evident that we are still confronted with many demands to more effectively control a disease which has become a menace to public health, a disturbance in industry and has brought about an additional expense that must be reckoned with.

The responsibility of the diagnosis and continued treatment of syphilis rests largely with the laboratory. Though the history may be suspicious, the lesion typical and the symptoms characteristic, the conclusive evidence of positive laboratory findings is usually desired. That the serologist may be worthy of meeting this responsibility of minimizing false reports and upholding a high standard of accuracy, the full cooperation of both patient and attending physician is needed. When a patient appears with a primary lesion for dark field examination, it is the responsibility of the serologist not simply to report the findings from this lesion, but specifically to determine that said patient is or is not infected with syphilis. Should the lesion be of a week or more standing, painted with mercurochrome or some other germicidal agent, as often happens, a second examination should be requested, the patient ordered to the laboratory again within a few days and the dark field continuing negative, should be followed by serological tests.

The attack of the spirocheta pallida is usually at a single localized point. Here the organism embeds itself for a period of several weeks, a month or maybe longer, until it can sufficiently increase in numbers, organize and prepare its forces for further invasion, before showing any clinical manifestations. During this period of incubation it appears that the organism not only increases in numbers, but produces some by-product, specific antigenic factor or maybe emphasizes some one or more of its components that seem essential to its further activity and protection.

When sufficiently reinforced in numbers and this protective secretion sufficiently accumulated for proper action, degeneration of tissue at this point of attack takes place and the chancre appears. Within a few days or several weeks, depending likely on the resistance of the host, this spirochetal product or antigenic factor leaks through the local defense that has now been built up, probably as a fore-runner of a generalized systemic invasion by the organism. Regional adenitis now appears, and a general serological and systemic change begins to take place. The serological change is evidenced by the appearance of some agent causing positive results in the tests for syphilis and the systemic change in due time by secondaries or clinical manifestations. This serum change on the part of the host obviously is a definite response to the invading organism, the spirochete and its by-products, and appears in the form of anti-bodies, of which there may be many and of different varieties. Among these anti-bodies has been definitely proven to be a protective body thrown out by the host directly against the spirochete, thus resulting in some immunity; and also a reagen or counter action probably against the by-products, playing no part in protection it seems, but bringing about a positive reaction when placed in contact with extract of lipoids, used in our reactions as antigen and proven to be related to some components of the spirochete. As the invasion of the host by the organism progresses, it is reasonable to feel that more of these by-products or special anti-

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genic factors are produced by the organism, in turn more reagen is thrown out by the host to counteract these spirochetal products and the serological reaction becomes more strongly positive. Should the infection continue without the interference of treatment, the organism continues on the offensive, and the host on the defensive, throwing out some protection or immunity it seems true, but seldom if ever in sufficient quantity to overcome the infection and bring about a cure.

These immune or protective bodies seem to appear in but small quantity if at all during the primary stage of the infection, but during and following the secondary stage, lasting over a period of years and giving some protection against re-infection though having but little influence, it seems on the response of the patient to treatment, or the time over which treatment should be continued.

The reagen, on the other hand, appears in quantity, usually during the early stage of the primary lesion as a fore-runner or at least along with the invading organism, and so far as we are able to determine, continues as long as the organism is active and producing this special antigenic factor.

The decrease or increase in the amount of reagen present is usually considered a gauge favorable or unfavorable in the progress of the disease. A decrease in the amount of reagen however, to a doubtful or weakly positive reaction in untreated tertiary or latent syphilis, as loco-motor ataxia, is not necessarily to be accepted with favor for it may not signify the organism is being overcome, but more likely inactive as a result of exhausted resistance on the part of the host.

The reduction in the amount of reagen present following treatment, on the other hand, is always a favorable sign, giving encouragement both to patient and doctor, and complete disappearance of the reagen is an omen of great hope, but one against which special guard should be taken over a period of time, that it may not be misinterpreted. For a negative serological reaction following treatment, does not necessarily signify the organism has been destroyed, and the patient cured, but that it has been rendered inactive and incapable of producing the antigen for the time being, which is responsible for positive serological reactions. This antigen seems to appear only when the organism is active, and this being true, the organism seems able to exist inactive over a period of several years. In case of inadequate treatment the organism in due time will return to activity and the serological reaction again become positive, so only after a period of three to five years, are we justified in accepting a negative reaction, as indicative of the infection being overcome and the patient cured. A serological reaction once rendered negative, and allowed to become positive again, often does not respond to the second series of treatments, as it did to the first.

It is my opinion that many of the so called Wassermann fast cases are due probably to inadequate treatment being given when the organism was most susceptible to treatment, and the patient more responsive. For it seems that both spirochete and patient more or less continuously under the influence of inadequate treatment will in due time, build up some resistance to this treatment. The spirochete instead of being destroyed or rendered inactive is irritated to the point of further activity and resistance, resulting in the production of a greater quantity of antigenic or protective secretion.

The patient likewise constantly under the influence both of spirochetal products and treatment over a period of years probably has become resistive also, and the cells responsible for the production of reagen may be overcome by the habit, stimulated to further activity by treatment, resulting in continuation of a strongly positive serological reaction. Under such conditions, however, a patient should not necessarily be judged Wassermann fast, as a result of continuous strongly positive reaction with any one of the standard tests. For occasionally the different tests disagree and one may show favorable response and the others continue strongly positive. Continually strongly positive reactions with several authorized tests and lack of evidence of favorable response from any source, demands deeper concern and serious consideration.

Experience has led me to the conclusion that a patient should not always be dismissed as cured on a series of negative reactions, from any one standardized serological test, neither should a diagnosis always be made in the absence of history or clinical findings.

In our laboratory we use the Kolmer

quantitative complement fixation test (the Wassermann) and the Kahn precipitation test. These tests usually agree quite closely and uniformly, giving much comfort and security in many reactions, especially in those that are questionable and indefinite.

I have been impressed, however, by the fact that occasionally there is a marked disagreement in these tests, one may be showing a negative reaction and the other a strongly positive reaction. Repeated reactions in these cases have convinced me that the difference is not due to technical error on the part of the serologist, and I realize the tests are too well established and standardized, to feel the difference is likely due to lack of sensitiveness of either test.

I am definitely of the opinion after observing such reactions, in several different cases, that we are dealing with different antigenic factors and likewise different reagens, in the complement-fixation and the precipitation tests. The reagens sensitive to both tests are practically always present during an active syphilitic infection, though often more pronounced for one test than for the other, and therefore the test sensitive to the higher amount of reagen is more strongly positive and will continue positive longer following treatment.

This probably can be accounted for by the possibility that we are dealing with different strains of spirochete, which likely vary somewhat in their antigenic factor, and as a result there would be some variation in the different varieties of reagen produced.

I have recently had experience with two patients whose serological reactions showed a definite disagreement by the two tests and impressing the plausibility of the feeling that we are dealing with different reagens. About fifteen months ago a patient underwent treatment, after repeatedly showing strongly positive reactions in our laboratory, with both Kahn precipitation and the Kolmer Wassermann tests. Following approximately a years treatment the Kahn test became negative, the Wassermann continuing strongly positive. Treatment has been continued over several additional months, the Kahn continuing negative and the Wassermann strongly positive.

The other patient is one of whose age, home environment and social standing is such that serological reactions for syphilis would ordinarily be made only as a routine procedure. This patient becoming ill, was sent to a hospital and along with other routine tests, a Kahn test was made, showing a strongly positive reaction. Having some hesitancy about accepting one test as diagnostic, under these conditions, the physician ordered the blood and spinal fluid of this patient sent to our laboratory for the Wassermann reaction. The Wassermann both on the blood and spinal fluid were negative, though the Kahn test on the blood was also strongly positive with us.

Unable to explain this discrepancy other than the patient had been celebrating rather extensively during the holidays, the physician was requested to restrict the patient's intake for a period of two weeks, during which time the patient was put on small doses of iodides. After this procedure a second specimen of blood was taken which showed a strongly positive reaction with both Kahn and Wassermann tests. To be sure there was no technical error, three days later another specimen was taken, showing the same strongly positive results.

Again, this seemingly supports the feeling that a variety of reagens may be present in syphilitic infection, occasionally one predominating each may vary from day to day and at times one or the other may be entirely absent. On several occasions, I have been thoroughly convinced that social standing plays but little part in eliminating the diagnosis of syphilis, for syphilis shows no respect of person, the cultured as the ignorant, the wealthy as the poor, and the white as the colored, are all subject to its attack. Every patient on whom a correct and proper diagnosis has not been made is potentially syphilitic, until proven otherwise, for no symptom is foreign to syphilis and as a result a mis-diagnosis is often made and treatment delayed as the symptoms present may be more characteristic of some other disease than of syphilis.

In conclusion, I pause to give tribute to the newly enacted laws of Kentucky and a number of other states of the Union, the so called "Premarital and Prenatal Laws." These laws require, as you know, that both a physical and serological examination be made on each expectant mother and every individual applying for a certificate of matrimony. In these laws, we find much assurance to the public, as a whole, protection to the innocent and

security to the unborn. I see but few reasons why the health records of these States should in the future bear the stigma, hereditary syphilis, for if not completely eradicated, hereditary syphilis should be reduced to a minimum. Among the few possible avenues of escape might be mentioned; the delay in the expectant mother calling on a doctor, until the time is too short to protect the baby, should the mother have syphilis. Secondly, should the doctor rushed and overworked as he is today, neglect having a serological test made until just before or just after delivery. Thirdly, should the serologist though competent, approved and cautious, make a false negative report, and lastly, should a mother reacting negatively possibly give birth to a syphilitic baby.

These are all mere possibilities and though we allow them full consideration, hereditary syphilis should no longer be a major problem. It is the birth right of each and every baby to be born free of syphilis, and this sacred charge is largely in the hands of the doctor.

The past holds much evidence of failure in proper protection for the innocent and unborn. and though the future is always filled with uncertainty, we feel we can now look there with hope for success and victory, over a disease which has undermined the health of the public and defied, it seems, the efforts of the doctor. Victory, however, can be claimed when and only when we can assure the expectant mother that the birthright of her unborn baby is safe and secure.

DISCUSSION

Winston U. Rutledge: Many questions arise in the sero-diagnosis of syphilis and it is often hard for clinicians to understand the serologists' points of view. I can only attempt to enlarge on a few of these problems from a syphilologist's angle. There are many difficulties associated with the serologic findings in any particular individual's case. It has been said that clinicians who regard their patients from only a serologic standpoint often run into difficulties when they attempt to offer prognostic estimates. In some patients, clinical and pathologic, syphilitic processes may progress and the disease persist while the patient remains serologically negative. On the other hand many patients go happily through life free from any symptom and with no evidence of syphilis save a positive serologic test. So it is extremely necessary to know just where we stand both clinically and serologically. Dr. Allen said that it depended largely upon the serologist's findings to establish the presence or absence of syphilis but from the above remarks you may infer that the well trained syphilologist must also bear some of this burden.

Brussgaard, working in the Oslo clinic some years ago, brought out a monumental piece of work on the effect of no treatment on syphilitic patients. Between 1891 and 1910 he confirmed the presence of syphilis in 2181 cases as far as it was possible to determine in those days and later between 1925 and 1927 he attempted to re-examine that same group of patients in an effort to discover how many of them did or did not show evidence of syphilis at that late date. Unfortunately he could only contact 473 but of that group 27.9 per cent showed no clinical or serologic evidence of the disease. Perhaps it is a slight comfort to us to feel that even in the absence of any treatment approximately one-third of all syphilitic patients will eventually undergo spontaneous cure.

Sero-resistance presents a number of problems and it is one that has become increasingly important in recent years as sero-resistance has increased three-fold within the last thirty years. This has been thought by some to be due to the acquisition by the spirochete of qualities making it immune to our modern anti-syphilitic drugs. Perhaps a truer explanation of this phenomenon is found in the steady increase in the sensitivity of our serologic tests over the same period of time. This increase in sero-sensitivity has been achieved to some extent by sacrificing sero-specificity but our modern routine tests are still highly specific and the more sensitive tests such as the Kahn presumptive and Kline exclusion tests are used only to eliminate rapidly negative cases from large groups of suspected individuals. From the clinician's point of view there are other angles to sero-resistance that are of still greater importance, the chief one being whether such resistance is indicative of a persistently active infection or not. It has been shown by numerous studies that the type of early treatment largely determines the percentage of sero-resistance, as in cases that are treated continuously this condition occurs in only 10 per cent of them, whereas cases who receive intermittent treatment show four times as much sero-resistance, while those cases taking irregular, interrupted treatment show about seven times as much sero-resistance. In many of these cases sero-resistance is associated with the persistence of foci of infection in central nervous system, heart or other organs of the body. On the other hand where such foci can not be demonstrated it is now thought on

good grounds that sero-resistance is often only an indication of the persistence of a well established immunity.

The questions that are brought by such a paper as Dr. Allen's give rise to many thoughts that might lead to endless discussion but he has clearly indicated to you some of the problems and some of the answers and I am sure we have all profited by it.

C. S. Eddleman: I think we have all come to a mighty deep pool of water. I sometimes wonder whether the medical profession has clarified the position. I think Dr. Allen has given us a very valuable paper. I have also enjoyed the discussion of the paper. I agree with Dr. Allen, that the serologic test is a guide and of assistance in our diagnosis and treatment. I don't think any case should be started on treatment without knowing what the blood condition is, unless the primary lesion is of short duration. During treatment at the end of six months, the patient should be given an interval of rest, and another serological test made. This, I think is a guide in treatment. If you have treated the patient for six months and have gotten a negative test, then you feel the treatment is satisfactory; if it is not negative, better step up on it. The serologic test is also a guide in determining if the patient is cured and should be carried out for a period of three years after all treatment is stopped. A negative test for three years, and a negative spinal, in the absence of other symptoms, is all we can promise.

Then, we might say, what does a negative test mean? If the patient is under treatment, you do want control or security. You continue treatment long enough to cure. "I don't believe you can cure it in six months or twelve months; I do believe, in early primary, in 18 months. Secondary requires longer, some latent cases are never cured." A negative test means the patient is under control, or cured. I think the Wassermann test is the most dependable of all. I don't care which you use, whether Kahn, Wassermann, etc. The Wassermann is most accurate.

Just listening back here, I think Dr. Allen referred to one of my patients. About four years ago, this fellow consulted me and a diagnosis of syphilis was made. The Wassermann was three plus. He went elsewhere for treatment. After three years of treatment he came back, said they had informed him he was Wassermann fast, his Kahn and Wassermann were plus four after he had received a series of Mapharsen and bismuth for three years. After giving this patient mercury for a period of two months, this whole situation changed. On mercury treatment, the Wassermann was doubtful, the Kahn was one plus. A month or so later, after neoarsphenamine, the Kahn was negative, the Wassermann was two plus. Back on mercury, the Kahn was negative, the Wassermann weak positive and so on. Then, after giving another series of neoarsphenamine, his Wassermann got three plus, the Kahn negative. This is an irregularity.

And yet most physicians claim the Kahn is more sensative than the Wassermann. (It may be well to state that the spinal fluid in this case was negative.) Then, after putting the patient back on mercury, the Wassermann dropped down. The question arises: Why is there a difference? Why these irregularities? Partly the patient's resisting power against the infection, partly the result of treatment. He had so many arsenic injections that arsenic was no longer effective. That, I think, a result of too much arsenicals.

Now just a word as to the Wassermann fast individual; I have never found one except a paretic. I believe, as Dr. Allen, that the majority of the so called Wassermann fast individuals are those who have been inadequately treated.

H. M. Weeter: I wish to emphasize two points in the laboratory diagnosis of syphilis.

(1) Examination of the primary lesion by dark-field yields a higher percentage of positives in the earlier stages than later. Spirochetes are readily demonstrated in a lesion a few days to a week old. They are sometimes found with difficulty in a lesion two weeks old. Delay in examination decreases the chance of positive dark-field findings. A part of this delay often is due to the hesitancy of the patient to consult a physician, and part of it often due to the clinician who erroneously suggests that the patient wait to see if the lesion will heal.

(2) False positive serological reactions are a delicate problem now in the light of our premarital laws. The wide use of serology in the Armed Forces is giving us valuable information on the occurrence of these false positive reactions. They are being found in a certain percentage of cases of measles; they are being found during the active stage of small pox vaccination reaction; and it is quite possible that a number of febrile conditions give false positives. Because of this any patient whose blood gives a positive reaction but whose clinical history and back-ground are negative for syphilis, should be put under observation and further tests made at intervals of 1 or 2 weeks before the patient is finally diagnosed as a positive luetic. It is the duty of the physician in this case, to calm the fears of a person who might have a false positive, explaining both the value of the test and also the errors in-

cident to the test, in order to secure full cooperation.

W. H. Allen. (in closing): In answering Dr. Sherrill's questions—do latent cases of syphilis (tertiary syphilis) come on more readily following treatment with arsenicals?

I have seen fewer cases of tertiary syphilis in the past few years than previously, so I am inclined to feel that arsenic plays no part in bringing about tertiary syphilis if administration in full dosage and over the proper period of time.

Is a full history of treatment given the serologist as a rule, when the patient is sent in for serological tests?

As a rule a schedule of the treatment is not supplied nor obtained by the serologist unless there is some question about the serological reaction and the patient returns for a check on the serological tests.

If the two tests, the Kahn and Wassermann do not agree, much discretion should be used in checking and properly interpreting the results. With both tests positive I feel, that if there is still some question the patient must be proven not to have syphilis rather than to prove that he has.

Dr. Weeter in his discussion referred to the false reaction following vaccinations.

It is my opinion, that all germ life has some factor in common. The spirochete probably has some component in keeping with a component of other organisms. Certain individuals may be hypersensitive to its component and as a result throw out reagen against this antigenic factor thus causing a false reaction following vaccination. After the vaccine has been absorbed, this false reaction will automatically clear up. If the history of a syphilitic infection is negative, two or more serological tests should be positive before making a diagnosis. The two cases I referred to in which the tests disagreed, one had a history of syphilis and the other showed symptoms that could be well accounted for by syphilis.

Dr. Bloch's statement that as high as three plus reaction might be regarded as doubtful is not in keeping with my opinion, unless this reaction is with one test and the others are negative. A continuous three plus reaction with two or more tests, certainly cannot be considered doubtful. if a four plus is to be considered diagnostic.

Dr. Heflin's question, which is more accurate, the Kahn or Wassermann is rather difficult to answer. Probably more false reactions occur with the Kahn test as it is more universally used and in the hands of more inexperienced technicians, as it is less difficult to perform. I feel both are quite accurate and in the majority of cases, they agree.

We had a very interesting case sometime ago in which the State Board of Health, Dr. Weeter and I failed to agree. The doctor who referred the case, after getting my report which was negative, called me, stating he had already gotten two positive results in this case. We asked for a check on this case and still we disagreed. Feeling that a reaction varies sometimes from day to day, I asked that we all get the blood on the same day, which we did and we still disagreed. The State Board becoming interested in the varied reaction decided to send the blood to a number of recognized laboratories in other states. I was informed that the reports received from these laboratories, varied as much as did ours, however I understood it was felt to be a false, non-specific, reaction and not faulty technique on the part of any of us.

I feel that such disagreements are due to the fact that we were using different antigens, and I am of the opinion that the laboratories of the State of Kentucky, should as nearly as possible, use the same make of antigens.

In answer to Dr. Garon's question, were the iodides given the patient referred to, intended as provocative, we did have that in mind, hoping the reaction would be clarified one way or the other.

CANCER OF THE CERVIX

Misch Casper, M. D.
Norvin L. Casper, M. D.
Louisville

Cancer of the cervix is always actively with us in all its fatal aspects. There is no physician who practices who has not been conscience-stricken for letting a case or more elude his diagnostic acumen at some time or another in his professional life. Thus, frequent discussions are in order to make us ever cancer-minded, for cancer of the cervix is the most frequent situation of carcinoma in woman. For study, the disease may be divided into several headings:

1. Location: cancer of the body of the uterus, of the cervix, and at the internal os.
2. Pathology: squamous cell, adenocarcinoma, sarcoma, and epithelioma.
3. Grades: I, II, III, IV, according to extensiveness of the growth.
4. Degree of radio-sensitivity or resistance. This has much to do with prognosis.

Further classification as to form, and so on, may be made. Etiology is still in doubt.

Read before the Muldraugh Hill Medical Society.

though we do know much about irritation, scar tissue, pre-cancerous conditions, and hormones, which even now are under much study. This terrible war is hampering and hindering our study of the cancer problem. We often think that if Hitler and his ilk, with their genius for destructive organization, had applied their efforts to the enemies of mankind rather than to mankind itself, what may they not have accomplished for the good of humanity?

Cancer is most common in the fourth decade of life, the most useful part of life, but we must not forget that it can and does occur in the early twenties, and even earlier; in fact, in 1939, 0.7% of all cancer deaths occurred in persons under fifteen years of age. We have had in the last three years three cases under twenty-eight years of age.

Symptoms: First, if the patient has textbook symptoms of weight loss, pain, and anemia, the case is far advanced; so let us try to get our cases by earlier signs. In 1906 one of us, (M. C.) rode horse and buggy style with Professor John G. Clark, gynecologist of the University of Pennsylvania, who was just made chairman of an American Medical Association committee to study the subject of cancer of the cervix and to make recommendations towards the goal of earlier treatment of cancer cases. His committee advocated frequent examination of the patient and a program of education of the public on the cancer problem. Can we today improve on such a program?

Dr. J. N. McCormack, a great organizer, once had each county given a lecture on cancer symptoms, and urged physicians to get their patients cancer-minded sufficiently for annual examination. Thus, each examining physician becomes keeper of his own flock, so that this cancer bogey will not insidiously slip up on them and become advanced before suspected.

Cancer of the cervix has few symptoms when it is early; hence, it is easily and often overlooked. A careful history is of utmost importance. Some slight change in the menstrual epoch is always significant; too often, an increased amount of bleeding should be a strongly suspicious symptom; a different discharge or change in vaginal secretion calls for careful inspection; any ulcer around the cervix that does not respond to local treatment is doubly suspicious, and calls for biopsy. After all, biopsy is our best bet for correct early diagnosis. Securing a specimen of tissue to submit to a pathologist is an office procedure available to any practitioner. Inspection and palpation, valuable as they are, do not compare with biopsy in finding the early carcinoma of the cervix.

The prognosis in cancer cases is in proportion to the grade of growth. It is good in Grade I; grave in Grade IV. Also, the younger the patient the more fatal and the more rapidly fatal. One thing that contributes to this fact is that a woman who is well past the menopause is alarmed at once if bleeding sets in, and presents herself to her physician; whereas, to the parous woman any irregular bleeding is not alarming. Also, a woman in her forties ascribes much of her excessive or irregular bleeding to "change of life," and her neighbors corroborate this erroneous idea. It is doubly important for a woman to be frequently examined in her near and oncoming menopausal years.

Cancer that is complicated with other conditions, such as syphilis, pregnancy, high blood pressure, cardiorenal disease, and so on, naturally makes for a poorer prognosis.

Treatment: We are all much interested in what can be done therapeutically. Forty years ago the Wirtheim pan-hysterectomy was the treatment of choice, but now gynecologists have largely abandoned this operation on account of the high mortality. Most of them now rely on radium. Radio-senstitve growths give a better prognosis than the resistant form. Radium is being given now in much larger doses than a few years back. It should be used in the cervical canal, and also parametrially in needles, thus giving a deeper penetration. We like to use about 3600 millicurie hours up to 4000 at the first application. This dosage may be repeated in six weeks, or a smaller secondary dosage given. In using a second or third dose, we must remember that the amount we use is added to the first dose, that is, it is cumulative; hence, we must regulate subsequent dosage accordingly. Also, radium is not by any means a harmless agent. It carries a potency for harm as well as for good. Its use is always a hospital procedure and must be carefully safeguarded. Radium may be used in conjunction with an operation, as advocated at the last A. M. A. meeting by Teahan, Wammock, and Weathenwax. The abdomen is opened, so that the radium needles

may be better placed. This opening of the abdomen is not so dangerous as is accidentally getting a radium needle in the peritoneal cavity. In discussing this paper we added that by means of such an operation we can better find metastases, and also remove the ovaries, which procedure slows the growth of cervical cancer by removing hormone stimulation. In large cauliflower growths we like to use electro-coagulation at the time of radium insertion. Deep X-ray therapy is the third agent of value in our fight against cervical cancer. It has a double effect:

1st. it destroys the sensitive form of cancer cell, which may be beyond reach of radium penetration.

2nd. it destroys the ovaries and thus checks harmful hormone formation.

X-ray therapy may be used prior to or after radium, or both before and after. The X-ray therapy is now delivered in a systematic, scientific manner. Dermatitis and skin burn and irritation are to be meticulously avoided by shooting the rays from different directions. Multiple doses are given daily up to twenty treatments, giving a dose of some 2000 roentgen units from each quarter, making 8000 roentgen units in all, and covering the entire pelvic area. Naturally, proper filtration, distance, and so on, must all be accurately figured.

Finally, if frequent examination is important before cancer is suspected or discovered, then it is ten-fold more important afterward. Many recurrences can be nipped in the bud by monthly examination for a few years, then three to six month examinations for a long time.

SUMMARY: Educate the public. Seek early diagnosis; clinch same with biopsy. Treat with radium, surgery, or X-ray therapy, or with all three of them.

Britain has lately discovered a dangerous insect which attacks men, women and children indiscriminately at all seasons but is particularly active and virulent on pay day or just after. Experts in the National Savings Committee first observed the pest and have identified it as the Squander Bug.

Everybody in the country now knows the bug which is easily recognized by its peculiar three pronged tail and body marking in the shape of a swastika. This pest is being systematically exterminated with the help of local savings committees.

CHILD FEEDING IN THE LOW INCOME GROUPS

OWEN S. OGDEN, M. D.
Louisville

The real problem of child feeding in the low income group, or in any income group, is a problem of teaching mothers the principles of the use of the foods essential for growth and development. She must be taught what foods are essential, and why certain foods are essential, then be taught intelligent planning and, particularly those in the low income group, must be taught intelligent selection and buying of foods. Teaching such things is not always a simple task, and must often be done as an individual problem.

In the city of Louisville there are seventy-nine Child Health Conferences held each month in twenty-two different centers carrying a case load of between six thousand and seven thousand children from birth to school age. In these conferences a real effort is made to give adequate instruction to mothers in the field of nutrition and good dietary habits, along with making physical examinations, giving health instruction and the prophylaxis of communicable disease. Such work can be done efficiently only if there is proper cooperation between the physician and City Health nurses working in the centers. All patients coming to the centers are in the lower income group and cannot afford the care of a private physician for well child care. The mothers who are most cooperative are those who previously attended the Mothers' Classes in the prenatal clinics in the city and learned the principles of good nutrition. Many mothers who have had such prenatal training regularly attend the Child Health Conferences, each with her one child or several successive children.

At the conference visit the child and the mother are seen by the physician, who advises the type of feeding best suited for the individual child. Written notes made during the interview are then turned over to the supervising nurse, who explains the instructions in detail to the mother, at a conference table. The mother is also supplied with diet lists, illustrated literature, and written dietary instructions. It is the practice that one of the nurses makes follow-up visits to see that the instructions are being carried out in the home. The child is weighed and measured at each conference visit and periodic phy-

Read before the Jefferson County Medical Society.

sical examinations are made to follow his progress.

It is believed that the method, thus briefly outlined, is adequate for teaching proper feeding and care of children in this group.

THE PRENATAL PERIOD: For a firm foundation of good nutrition, the first service must be given in the prenatal period. In Louisville the patients are cared for in prenatal clinics, of which six are held each week, two at the City Hospital, and four in outlying city health centers. At each prenatal clinic a City Health Nurse conducts a mothers' class at which the requirements for proper nutrition of both mother and infant are taught. Approximately two thousand prospective mothers attend these clinics and conferences.

The entire work in this field is directed toward building bodies by the prevention of poor nutrition and nutritional disorders, rather than by doing repair work on those who have had a poor start. It is for this reason that a beginning must be made during the prenatal period. The work is that of preventive medicine, and the foundation should be properly built long before the birth of the child. There must be available for study bone, tooth, and muscle structure, good material in the form of all the essential proteins, carbohydrates, fats, minerals, and vitamins.

A diet for the mother, to be low in cost, yet sufficient to supply the minimum essentials. This should consist of a quart of milk each day (skimmed milk and buttermilk are cheaper, yet adequate); one or more cooked green or yellow vegetables each day, a moderate serving of lean meat two or three days a week, with eggs on the other days; one or more servings daily of whole grain bread or cooked cereal (an excellent food to be used liberally in a low-cost diet); a fresh fruit daily; and butter or a butter substitute. For an additional source of vitamins A. and D. one teaspoonful of cod liver oil is given daily. Peanut butter as a meat substitute, and molasses, because of the calcium and iron content, are good, but inexpensive, additions to this diet. If analyzed, this diet will be found to contain all of the dietary essentials; mineral, organic and vitamin.

THE INFANT: The most satisfactory infant food has aways been the mother's own milk. It is the cleanest, safest, most complete, and is available at the least cost. However, it must come from a mother in good physical condition, who is getting an adequate diet and sufficient rest. A regular feeding schedule with an emptying of the breasts by a vigorously nursing infant is the best insurance of a generous supply. An extra source of vitamins A. D. and C. is supplied to the child's diet by using cod liver oil and either orange juice, tomato juice, or pineapple juice at about the third week of age.

If it is impossible for the infant to be breast fed, the cheapest and most adequate milk is irradiated, evaporated milk, with the addition of either cane sugar or corn syrup as the carbohydrate.

Cooked whole grain cereal such as oatmeal, farina or pablum, is started at about the third month and vegetables, such as carrots, or green beans are started at the fourth month. Banana is a valuable addition at the fifth month, and following this, egg yolk, beef broth and liver soup at the sixth or seventh month. Later, a starch, potato or macaroni, and stewed fruits are added. This diet is adequate into the third year.

The selection of green vegetables and fruits will vary with the locality and the season, since prices vary accordingly. During the infant period it is cheaper and safer to use canned strained vegetables.

THE PRESCHOOL CHILD: In the preschool age the diet is changed only by the addition of simple desserts, mainly fruit and gelatin desserts, by the addition of bread (wholewheat or rye being better), and by a more liberal allowance of meats. Many of the clinic mothers are found to be offering candy and ice cream as bribes or rewards during this age period. Not only have these concentrated foods no place in the diet of the normal child, but they add materially to the cost of the diet.

Milk is given by cup or glass from one year of age. A quart should be given each day, a pint and a half for drinking and the remainder used in the preparation or cooking of the food. A change to bottle milk instead of evaporated milk is often made at this time, but the extra cost of bottle milk is often a deterrent to such change.

Particular attention is given to the preparation of the vegetables. If the vegetables are fresh the cooking period should be short and only a small amount of water should be used. The home garden is the best source of fresh vegetables in summer, but this source is available only in rural communities. By using home

grown vegetables there is eliminated the vitamin loss that occurs during the lor period of time required for transportation and marketing. Most canned vegetables are superior in vitamin and mineral content to those which are poorly handled and overcooked at home. With several children in the family, canned vegetables can be bought more cheaply in larger quantities than in smaller ones.

In feeding the infant and the young child, milk must be limited to one quart, otherwise it will become a filler and take the place of other essential foods. If a child is not taking solid foods readily, the quantity of milk may be reduced for a short period of time. Most children who are well handled on a regular feeding schedule and who are not fed haphazardly or between meals, eat well and are not feeding problems. On the other hand, children who are not fed on a regular schedule, and who are forced or bribed into eating, are usually allowed to have large quantities of milk; and it is among such children that nutritional anemia and other nutritional disorders are prevalent.

The Older Child: From the beginning of the school age up to adolescence, the daily diet should consist of the following mineral essentials:

One quart of milk, a meat or meat substitute, a fresh cooked vegetable, whole grain cereals, a fresh fruit, a cooked fruit, a starchy food, Cod liver oil.

The list affords much flexibility in planning the diet. It should be so planned that it will fit into the plans for the entire family. Highly seasoned foods and stimulants such as coffee and tea have no place in the child's diet.

In the low income diet, cereals and whole grain foods should make up a large part of the bulky foods, as they are a good source of protein and, together with milk, cover many of the essential requirements. With more liberal income, eggs, meat, vegetables, and fruits, should make up more of the bulk of the diet.

For a source of protein, calcium, phosphorus and vitamins A. and G., a quart of milk and no less should be the requirement for every growing child. Skimmed milk or buttermilk may be used if whole milk is beyond the family budget. If desirable, one pint of bottle milk may be used, and the other pint may consist of evaporated milk with may be used in making cocoa or cream soups. Whole milk is more palatable for drinking. Less than one quart of milk will not supply sufficient calcium and phosphorus for proper bone and tooth growth.

Meats are one of the most expensive items on the diet list. These should be lean meats of the more inexpensive cuts. Cheese used liberally is a good meat substitute, as is also peanut butter. An egg each day, if possible, should be included.

It may be well to repeat, that vegetables which are abundant at a particular season of the year are cheaper and the selection should, when possible, be made from them. Fruits should be chosen in the seasons in which they are most plentiful. A short cooking time for vegetables is again stressed. Cod liver oil of known vitamin potency should be used. An arrangement with the City Health Department of Louisville has made cod liver oil available in all of the Child Health Conferences at a very low cost; and to those on relief or having very low incomes, it is furnished free. Cod liver oil should be continued in small amounts throughout the summer since there are some dark days with insufficient sunshine and also for the reason that the child should not lose the habit of taking it.

Quite often a part of the daily requirement of milk for the school age child is given with the school lunch, usually no more than one-half pint. This, of course, is a part of the day's supply. For children who must take prepared lunches to school, such lunches should be so planned that the other two home meals will balance the daily requirements of essential foods.

Mothers who do not follow clinic instructions are apt to use far too much sugar in the foods of the growing child, too much in the cereal, too much in drinks such as cocoa, and too much in desserts; and most objectionable of all, such mothers often allow the child candy or sweets between meals. This use of excessive quantities of sugar is one of the principal causes of malnutrition in many children. Since sugar is a concentrated carbohydrate, it, when used to excess, replaces other foods that the child should have and often leaves the child with no appetite at meal time. Almost invariably when a malnourished well child is brought into one of the conferences by a mother who complains that the child has no appetite, it is found that an excess of carbohydrate food is being used and that between meal eating is permitted with little or no restraint. The effort is made to teach such

mothers to permit no between meal eating other than fruit, and to use little or no sugar in foods at mealtime.

Many workers have expressed opinions to the effect that an excess of carbohydrate in the diet either prevents proper tooth growth or has a direct fermentative action in the mouth which causes tooth decay. Such opinions, together with other well known ill effects caused by the excessive use of carbohydrates, lead to the conclusion that sugar should be used in very small quantities.

The Psychology of Child Feeding: Not only is the "feeding problem," which is based on poor psychological handling, found in the upper income groups, but it is often just as vital a problem in the lower income groups, and prevents good nutrition even though an adequate diet if offered the child.

A child should be taught good eating habits on regular schedule from the very beginning. Regular hours for meals, with no coaxing or bribing, must be enforced. A child should never be allowed to carry play time into meal time by bringing play materials to the table. An overtired child often is a feeding problem. Meal time should be free from emotional upsets. It should be pleasant, but entirely given over to the task at hand, namely, that of eating.

Summary

1. The problem of intelligent child feeding in the low income group is a problem of teaching and training mothers careful planning and intelligent buying of essential foods.

2. Nutritional training should begin during the prenatal period and continue throughout childhood at regular intervals.

3. The essential food requirements must be supplied the mother in the prenatal period, and the infants, preschool and school children.

4. Good eating habits and regular hours both for meals and rest are highly important.

All the towns listed here are in Kentucky: Se Ree, Mook and Buras are in Breckinridge County; Pactolus and Bet, in Carter County; Ophir and Zag, in Morgan; Wago and Aaron, in Clinton; Vi and Piso, in Pike; Uz, in Letcher; Ogle and Botto, in Clay; Olga, in Russell; Otas, in Whitley; Tulga, in Greenup; Turin, in Owsley; Livia, in Daviess; Kildav, in Harlan; Kerz, in Johnson and Joppa, in Adair.

PUERPERAL CONVULSIONS AS THE COUNTRY DOCTOR SEES THEM

R. H. Lewis, M. D.
Wildie

If you remember, Fellow Doctors, when you asked me to write a paper for our meeting, I only promised that I would mention a disease. I now mention puerperal convulsions as the country doctor sees them.

I thought then that I would write a paper on this disease but the more I thought and the more I search for data, the more convinced I am that it will only be mentioned. The more I try to find, the less I know and find that the most of the writers are in the same condition. I haven't been able to find the real cause for puerperal convulsions; although each writer seems to have a different cause and none of them positive. As for me, from what little experience I have had with them I think that syphilis is one of our greatest causes. I cannot tell you just why I believe it except that two thirds of the cases I have had in my practice have been syphilitics and they are untreated cases. I cannot remember a single case of puerperal convulsions occurring in a person who has been properly treated for syphilis. Neither can I recall a single case that has had proper prenatal care. Practically all of the cases that you see, you are called at the most unexpected time and the most unexpected place and the time when you are most unprepared and there is a case of puerperal convulsions. What are you going to do?

The first case that I saw was about 43 years ago. I went to Cedar Fork, Tennessee and tacked up my shingle. Two or three mornings later, I was called back into the River Hills about ten miles from any other doctor to see a girl 16 years old in the second stage of labor and convulsions. That was my first case of convulsions. The baby was born during the convulsion. The girl, after having 69 convulsions, got well and the baby also lived.

Another case that I visited was about 12 or 15 years ago. A young man called me to Crooked Creek saying his wife was having fits. I took Dr. Jones with me. I found a young woman 17 years old having her first baby. She was in second stage of labor when we arrived. We delivered the baby with forceps but both died.

Seven or eight years ago, a young wo-

Read before the Rockcastle County Medical Socity.

man in Wildie with first birth, gave birth to twins. I stayed with them an hour and dressed both mother and babies. About an hour after that, I left Wildie for Lafollette, Tennessee. About four or five hours after the babies were born, she began to take convulsions. She was rushed to Berea Hospital. She and the babies lived.

I have had quite a number of convulsions during my practice, I think entirely too many. Among the number of cases, two mothers and their babies died.

TREATMENT

First, we will want sedation. Next, we will want elimination. We will want to relieve the pain, especially the pain in the head. That pain is horrible and one of the greatest signals of danger. In this case, I would not hesitate to give morphine gr. ¼ hypodermically and would follow closely with magnesium sulphate 2 cc. of a 50% solution. It acts beautifully with morphine and will continue the sedative effect of morphine much longer than if given by itself and will prevent the clogging effect that we do not want in morphine.

Veratrum veride is a sedative and also a depressor and I have had good effects from this drug. I would give it until the pulse is lowered to sixty or eighty.

Glucose is recommended very highly, though I have never given it.

For elimination, first, I would wash out the stomach thoroughly then I would leave in the stomach one pint of water thoroughly mixed with one teaspoonful of alchroid. Next, I would give an enema of hot magnesium sulphate solution high up into the bowel and continue until the bowel is thoroughly emptied. Put an ice pack to the head. If such a thing as a bath tub could be had, I would put the patient into a tub of as hot water as she could bear and keep her there for some time. If those things do not give relief, then the next thing, I would try to do, would be to rush her to a hospital where we could plan to empty the uterus.

The widespread dissemination of tuberculosis is common knowledge, but the toll of lives taken is not always realized. In the United States alone, since 1900, a comparatively short span of life after all, more than four million have succumbed prematurely to the tubercle bacillus. Godias Drolet, in Clinical Tuberculosis, Edited by Benjamin Goldberg, M. D. In Kentucky since 1911, 99,995 have died from tuberculosis.

BOOK REVIEWS

MENTAL ILLNESS, A GUIDE FOR THE FAMILY: By Edith M. Stern, with the Collaboration of Samuel W. Hamilton, M. D., The Commonwealth Fund, Publishers, New York. Price $1.00.

This book is offered as a guide for the family through the difficult experience and unnecessary suffering that comes when mental illness strikes one of its members. It takes the reader behind the scenes in mental hospitals. It offers specific direction of the hospital to the reception of the patient back home after discharge.

Dr. Samuel W. Hamilton who has had wide experience as a Mental Hospital Adviser of the U. S. Public Health Service has collaborated with the author to produce a book that is both authoritative and readable.

OFFICIAL MILITARY MEDICAL AND SURGICAL MANUALS, Methods and technic officially approved for use by Medical Officers. Official Manuals, Ophthalmology and Otolaryngology volume II. 331 pages, 6 x 9 with 124 figures containing 188 illustrations. W. B. Saunders, Publishers, Philadelphia. Price $4.00.

Abdominal and Genito-Urinary Injuries, Volume III. 243 pages, 6 x 9 with 79 figures containing 274 illustrations. W. B. Saunders, Philadelphia, Publishers. Price $3.00.

These volumes are of a series developed under the auspices of the Division of Medical Science of the National Research Council to furnish the medical departments of the U. S. Army and Navy with compact presentations of necessary information in the fields of military surgery. The individual manuals are prepared under the auspices of various subcommittees of the Committee on Surgery of the Division of Medical Sciences of the National Research Council and are edited by the Committee on Information.

THE COMPLEAT PEDIATRICIAN by W. C. Davison, M. D., Durham, N. C. Fourth Edition including 1500 recent references. Duke University Press, Durham, N. C., Publishers. Price $3.75.

This volume was designed for the use of students, internes, general practitioners and pediatrists. Much in this new third edition has been rewritten because of the accumulation of the addition of pediatric knowledge during this last three years. So concise is the information on this subject that the book can readily serve as a ready reminder to be carried like a stethoscope in a physician's pocket or bag to jog his memory, a reliable reminder which often makes the physician the master of the situation.

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ANNUAL MEETING LOUISVILLE
OCTOBER 4-6, 1943

COUNTY SOCIETY REPORTS

Campbell-Kenton: The regular monthly meeting of the Campbell-Kenton County Medical Society was held at Spears Hospital, Dayton, on Thursday evening, May 6, 1943 with eighteen members present. The meeting was called to order by the president, Dr. N. A. Jett at 9:00 P. M.

Cards of thanks from the Youtsey and Menefee families were read. A communication was read from Dr. McCormack concerning the State meeting to be held in Louisville October 4th and 5th. A letter from Dr. Robert M. Shirey, committee on Industrial Health. regarding Epidemic Kerato-Conjunctivitis was read.

The program committee (Dr.Bach) reported that Dr. Heiselman will present a paper at the June meeting.

A committee composed of Drs. Siehl, Mersch, Miner, Ryan, Schwertman, Bell, Phythian, Frickman, was appointed to meet with representatives of the Cincinnati Academy of Medicine and Chamber of Commerce on Monday, May 10, to further plans for obtaining the next meeting of the Southern Medical Association in Cincinnati.

An excellent paper was read by Dr. Ed Northcutt on "The Elements in Gall Bladder Surgery." Generous discussion was entered into by Drs. H. Caldwell, Bach, Cornell, J. Northcutt and Morris. Discussion was closed by Dr. Ed Northcutt.

Dr. White presented an abstract of the state plan of Medical and Obstetrical Care of soldiers' wives and children. After considerable discussion, the plan was referred to a committee, consisting of Drs. DeVillez, Heiselman and Morris for further study.

Dr. Jett called a special meeting of the Society to be held at St. Elizabeth Hospital on Monday, May 17th at 8:45 P. M. for the purpose of hearing Dr. Percy Pelouze on "Treatment and Management of Gonorrhea."

There being no further business, the meeting was adjourned.

Robert L. Biltz, Secretary.

Fayette: The regular meeting of the Fayette County Medical Society was held at the Good Samaritan Hospital on June 8, 1943. George Prewitt, D. M. D., gave a paper entitled "Dietary Control of Dental Diseases."

The pediatrics - ear - nose - and - throat group made the recommendation at the meeting that the removal of tonsils and adenoids be postponed from June fifteenth until some time in the fall, the exact date to be determined by the incidence of poliomyelitis in the City and County. The Fayette County Medical Society unanimously endorsed this suggestion and recommended that the City of Lexington-Fay-

ette County Board of Health advise the public of the action of the Society.

This action was taken by the Medical Society as a result of the many reports in various journals concerning the development of the bulbar form of poliomyelitis within thirty days after tonsillectomies.

As secretary of the Fayette County Medical Society, I feel that this is a very intelligent procedure on the part of the members of the Society.

Charles D. Cawood, Secretary.

Hopkins: The Hopkins County Medical Society held its regular meeting at the Hospital, June 17, at 7 o'clock, with the following members present: Drs. Strother, Finley, Veal, Townes, Corum, Moore, Morton and Garnier.

G. L. Simpson, Greenville, gave a paper on "Bladder Injuries Associated with Fractured Pelvis."

Minutes of the last meeting were read and approved. The meeting adjourned.

W. H. Garnier, Secretary.

Shelby: The Shelby County Medical Society met at the office of the Board of Health at 6:30 P. M., on Thursday, June 24th. Dr. M. H. Skaggs, the host of the evening, then invited the members to the Colonial Inn where a delightful chicken dinner was served.

After the dinner the president, Dr. Bell, called the meeting to order. The minutes of the previous meeting were read and approved.

A motion by Dr. Allen, seconded by Dr. Carroll, that each member be assessed $1.00 to take care of the expense of the guests at the last meeting and the surplus be placed in the treasury. Motion carried.

Dr. Bertha Chase Wiseman, of LaGrange nominated for membership. At this time the meeting was turned over to Dr. Skaggs, the host of the evening. Dr. Skaggs introduced Dr. E. R. Gernert and Dr. O. O. Miller of Louisville.

Dr. Gernert gave a very interesting talk on the Home Care of Tuberculous Patients. Dr. Miller spoke on Treatment. The papers were well discussed.

The following members were present: Drs. Bell, Furnish. McMurry, Hughes, Buckner, Beard, McMunn, Blaydes, Dowden, Richeson, Nash, Collins, Allen, Weakley, Carroll and Risk.

A motion was made to adjourn. The next meeting will be on September 23rd when Dr. Sleadd will entertain.

C. C. Risk, Secretary.

Madison: The meeting of the Madison County Medical Society was held at Richmond at the Trachoma Hospital on June 17, at which time Dr. Wilson Dodd, Superintendent of Berea College Hospital, gave a few of the plans in mind for his future work beginning in September of this year. At this time he joins the Near East Foundation to assume charge of the Medical Rehabilitation program in Greece as the country in which to work. Plans are more completely worked out for this country than any other to date as the lay organizations such as this will be in charge of rehabilitation.

We are indeed sorry of Dr. Blue's unexpected absence in Hazelwood Sanatarium, but hope for him a speedy return.

Scott T. McGuire, Secretary.

Union: The Union County Medico-Dental Society met at the Sturgis Hotel, in Sturgis, on July 6, 1943 at 7:00 P. M. The secretary read cards of appreciation for flowers sent to the families of Dr. I. D. Winston and Dr. Ben F. Underwood.

The program was in charge of Major S. E. Woolpaw of Camp Breckinridge, who spoke on "The Diagnosis of Early Tuberculosis." He presented some X-Ray films to illustrate his subject. He gave a very interesting discussion which was to the benefit of all present.

Major Sanders Cohen, Director of the Medical Service at the Camp Breckinridge Hospital and Dr. J. Garland Sherrill of Louisville, were visitors and both gave interesting talks.

There being no further business the meeting adjourned.

Members present were: D. L. Vaughn, C. B. Graves, D. M. Sloan, G. B. Carr, J. W. Conway, H. B. Stewart, Bruce Underwood.

Guests present were: Major S. E. Woolpaw, M. C., Major Sanders Cohen, M. C., J. Garland Sherrill, M. D..

Bruce Underwood, Secretary

NEWS ITEMS

Dr. Alvin B. Ortner announces the opening of his office. Practice limited to Surgery. 905-06 Brown Building, Louisville. 11:00 to 1:00 and by appointment.

J. Henry Heuser, Louisville, age 78, surgeon for the Mengel Company for half a century, died July 1st. He recently was presented a gold button in recognition of his services to the Mengel concern. He was also chief medical examiner for the Metropolitan Insurance Company for thirty-eight years until his retirement a few years ago. He was a native of Seymour, Indiana, and a graduate of the University of Louisville School of Medicine.

Isaac Dix Winston, age 68, a physician for forty-two years, died at Sturgis on June 25th from a paralytic stroke. Doctor Winston was the son of the late Dr. G. V. Winston who practiced medicine in Sturgis during the Civil War. He received his degree in medicine at Vanderbilt University.

Shelby County lost a fine citizen in the death of Dr. Thomas Dickinson Burgess. He was a newcomer, a resident of only a few months. He was a retired physician and surgeon, with a lifetime of success to his credit. He had selected this community, and had bought a beautiful home here where he planned to enjoy the rewards of rest after a busy career.

Although he was 73, he was possessed of a supply of untiring energy. When labor proved unavailable, he turned his own hand to the hard work of tree trimming, gardening, weed cutting and odd jobs.

Dr. James L. Lewis, formerly with U. S. Veterans' Hospital, Hines, Ill., was named superintendent of the Warren County Tuberculosis Sanatorium, succeeding Dr. John P. Wheeler, who resigned to accept a place with an Indiana sanatorium.

Colonel Rufus L. Holt, Laboratory Director, 5th Corps Area, Fort Benjamin Harrison, Indianapolis, Indiana; Major D. M. Haralson, M. I., Territorial Commissioner, Honolulu, Hiawaii; Major Clark Dugan, Camp Campbell; Dr. Virginia Howard, Health Officer, Leake County, Mississippi; Walter Cloyd, Medical Student from University of Tennessee, former student of the State Board of Health, were visitors in the Journal Office.

Dr. Ernest Figuera and Dr. Manuel Morales, Mora, Caracas, Venzeula, are visitors for several weeks observation study in the administration, each, recently completed under the Rockerfeller Foundation fellowship a course in public health at the Johns Hopkins School of Public Health. These "friendly neighbors" will visit various counties in our state and meet our local profession.

Dr. Della Hertzsch, a Louisville physician for fifty years, died at 5:30 P. M., July 12, 1943. She retired from practice eight years ago.

She was visiting physician for the Louisville public schools from 1918 to 1928. She was born in Mexico City, Mexico, and her family moved to Jeffersonville, Ind., when she was a child. She was graduated from Jeffersonville High School and the University of Michigan Medical School. She was a member of the American Medical Society and the Jefferson County Medical Society.

Dr. Virgil E. Simpson, 67, widely known physician, Lousville, and Miss Della Aldridge, 47, long time technician-nurse in his office, were recently married at the Duncan Memorial Chapel, Flaysburg.

Dr. U. G. Holloway, age 90, physician of Versailles for more than sixty years and the last of seventeen doctors in the Holloway family, died July 14th.

BOOK REVIEWS

CHEMOTHERAPY OF GONOCOCCIC INFECTIONS by Russell D. Herrold, B. S., M. D., Associate Professor of Surgery (Urology) College of Medicine, University of Illinois, Chicago. The C. V. Mosby Publishers, St. Louis. Price $3.00.

An effort is made in this volume to simplify the management of gonococcic infection, the treatment of various groups is outlined according to success or failure of the initial response to a short course of the most efficacious present-day chemotherapeutic agents. As many of patients suffering from this disease are in private practice, this book gives the doctor in general practice a general knowledge of treatment and the laboratory technic for aid in diagnosis.

MILITARY SURGICAL MANUALS. Issued under the auspices of the National Research Council. Published by W. B. Saunders Company, Philadelphia. Price $2.00.

This volume is one of the series developed under the auspices of the National Research Council to furnish the medical department of the U. S. Army and Navy with compact presentations of necessary information in the field of military surgery by America's best authors. The subjects discussed in detail are the managements of fractures, bone injuries and disease.

FUNDAMENTALS OF IMMUNOLOGY: By William C. Boyd, Ph. D., Associate Professor of Biochemistry, Boston University School of Medicine, Associate Member, Evans Memorial, Massachusetts Memorial Hospital, Boston Interscience Publishers, Inc., 215 Fourth Avenue, New York City, Publishers. Price $5.50.

The purpose of this book is to serve as an introduction to immunology for medical students, chemists, biologists and others interested in an understanding of the basic principles of this science. There are chapters devoted to immunological methods and their application to certain diseases. Preparation and use of vaccines are described in detail.

FUNDAMENTALS OF PSYCHIATRY: By Edward A. Strecker, M. D., So. D., F.A.C.P., Professor of Psychiatry, Chairman of the Department, Undergraduate School of Medicine, University of Pennsylvania, Psychiatrist to the Pennsylvania Hospital, Attending Psychiatrist, Philadelphia General Hospital. 15 illustrations. 201 pages. J. B. Lippincott Company, Philadelphia, Publishers. Price $3.00.

This book has grown out of the teaching experience of the author and each presentation and diagram has been subjected to the test of the classroom.

The general practitioner, the medical student and the physician in the armed forces can make good use of this handbook. Its primary purpose is to enable the reader to obtain with a minimum of time a workable picture of the field of psychiatry, knowledge which constantly can be interwoven with his work.

Basically, the book emphasizes the important role which psychiatry plays in the clinical aspects of Internal Medicine. The inclusion of discussion and evaluation of the newer methods of treatment bring the book up to date. The examination of the mental patient, the etiology, classification and treatment of the psychoses are thoroughly covered.

A chapter on the treatment of military neuropsychiatric disabilities is included, a chapter which will be invaluable to the medical officer meeting psychiatric problems. The author speaks with authority when discussing military psychiatry because of his combat experience and the fact that he was chosen to write the psychiatric section of the Technical Guides to Therapy for Medical Officers in the Army. In addition a chapter on the Psychiatry of War is included.

This is a book intended for the practitioner who wants to recognize the nervous patient and treat him for mental as well as for physical maladjustments. This is a working book, it will find a permanent place in your right hand top desk drawer.

FOOD CHARTS: FOOD AS SOURCES OF THE DIETARY ESSENTIALS prepared by a joint Committee of the Council on Foods and Nutrition of the American Medical Association and of the Food and Nutrition Board of the National Research Council, American Medical Association, Chicago, 1942. Paper. Price 10 cents. Pp. 20, Quantity prices on request.

Members of the profession attending the State Medical Meeting this year had an opportunity to study the nutrition exhibit loaned by the A.M.A. Colored slides presented dramatically many of the nutritional deficiencies frequently observed in Kentucky. The nutrition pamphlet which accompanied this exhibit is now available as a handy reference. There are 8 charts that show at a glance the proportion of the daily allowance provided by a selected serving of food for protein, calcium, iron, vitamin A, thiamine, riboflavin, nicotinic acid and ascorbic acid. These can serve as a quick reference in making dietary recommendations or can be used for a simple demonstration to patients. A short discussion of the evidences of deficiency accompanies each table. Included are the Recommended Dietary Allowances of the National Research Council for minerals and vitamins and Minimum Dietary Requirements developed by the Foods and Drug Administration for purposes of labeling special dietary foods. These should be of help in the recommendation and selection of vitamin concentrates.

A TEXTBOOK OF CLINICAL NEUROLOGY: By Israel S. Wechsler, M. D., Clinical Professor of Neurology, Columbia University, New York; Neurologist, The Mount Sinai Hospital; Consulting Neurologist, The Montefiore and Rockland State Hospitals, New York. Fifth Edition Revised. 840 pages with 162 illustrations. Philadelphia and London. W. B. Saunders Company, 1943. Price $7.50.

The numerous advances made in this subject have been included in the fifth edition, necessitating changes and additions to almost every chapter. The object of this book is to give a digest of what is known in neurology without stressing detailed reports, most of the problems present are based on the author's personal experiences.

PSYCHOSOMATIC MEDICINE. The Clinical Application of Psychopathology to General Medical Problems by Edward Weiss, M. D., Professor of Clinical Medicine, Temple University Medical School, Philadelphia, and O. Spurgeon English, M. D., Professor of Psychiatry, Temple University Medical School. 687 pages. 6' x 9' illustrated. W. B. Saunders Company, Publishers, Philadelphia. Price $8.00.

Every physician has problem cases which are psychosomatic in nature, some are entirely psychic in origin while in others both mental and physical etiology is evident. This book fills a vital need as it gives the general practitioner a complete and practical guide in managing disorders in general practice of psycho-physical origin. The authors tell how to differentiate functional illness from organic disease, how to evaluate the part played by emotional factors in organic disease, especially incipient illnesses with a neurotic tendency.



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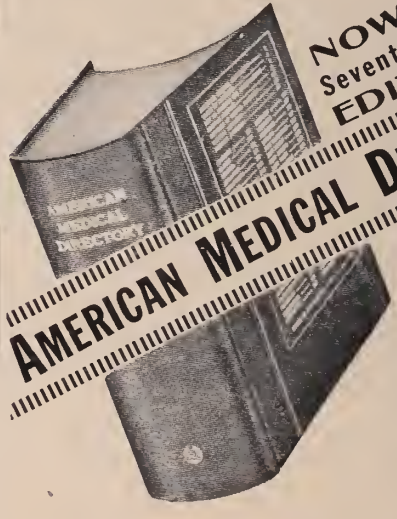
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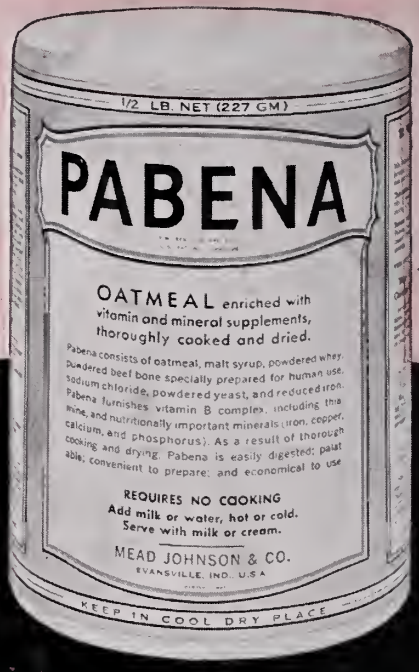
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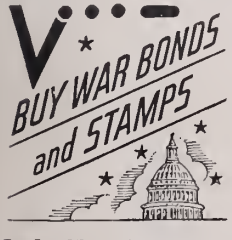
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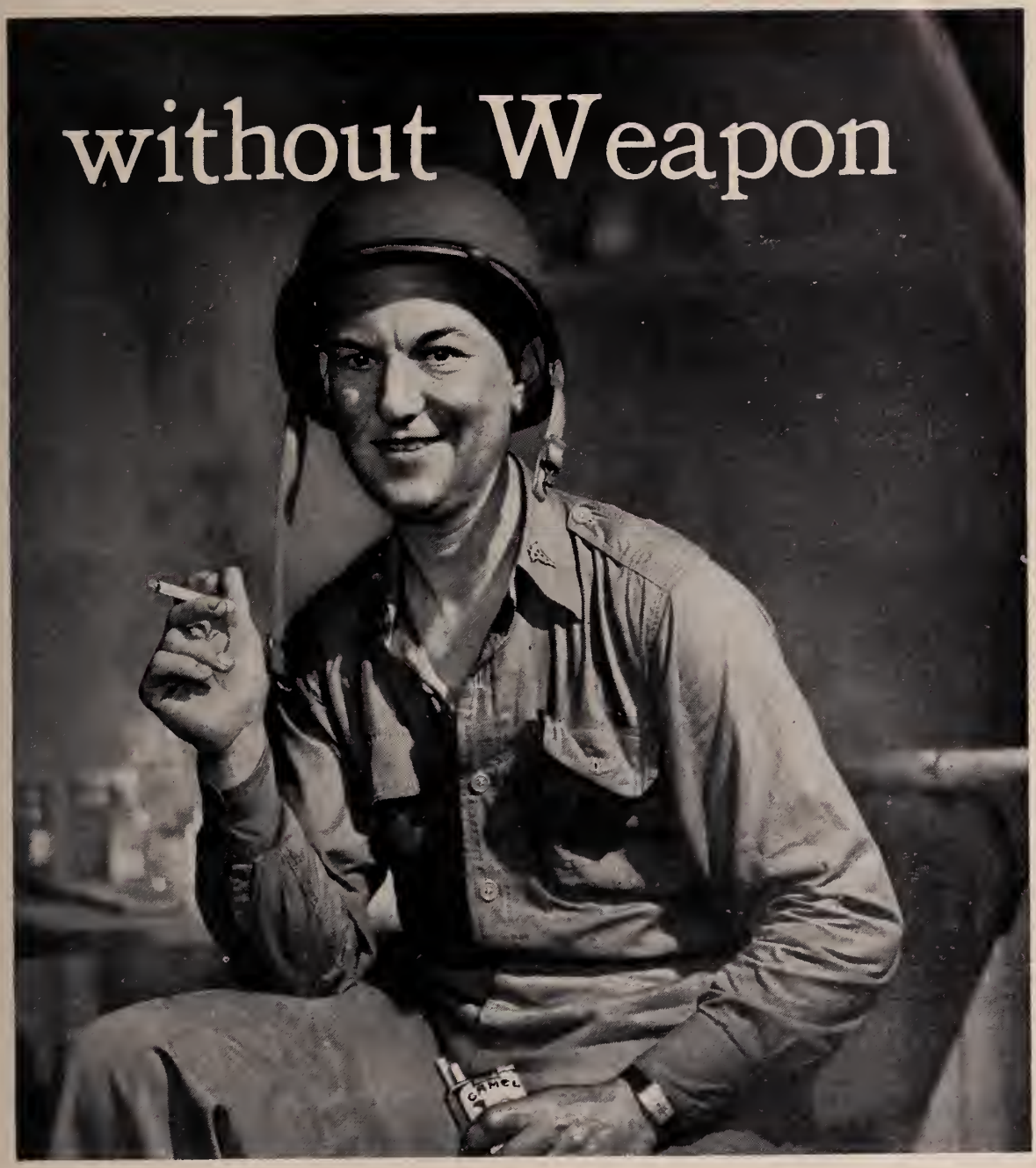
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CALENDAR OF COUNTY SOCIETY MEETINGS

COUNTY	SECRETARY	RESIDENCE	DATE
Adair	W. Todd Jefferies	Columbia	September 1
Allen	A. O. Miller	Scottsville	September 22
Anderson	J. B. Lyen	Lawrenceburg	September 6
Ballard	F. H. Russell	Wickliffe	September 14
Barren	C. R. Markwood	Glasgow	September 15
Bath	H. S. Gilmore	Owingsville	September 13
Bell	Edward S. Wilson	Pineville	September 10
Boone	R. E. Ryle	Walton	September 15
Bourbon	George M. Jewell	Paris	September 16
Boyd	R. G. Culley	Ashland	September 7
Boyle	P. C. Sanders	Danville	September 21
Bracken-Pendleton	W. A. McKenney	Falmouth	September 23
Breathitt	M. E. Hoge	Jackson	September 21
Breckinridge	J. E. Kincheloe	Hardinsburg	September 9
Bullitt	George B. Hill	Mt. Washington	
Butler	D. G. Miller, Jr.	Morgantown	September 1
Caldwell	W. L. Cash	Princeton	September 7
Calloway	J. A. Outland	Murray	
Campbell-Kenton	Robert L. Biltz	Newport	September 2
Carlisle	E. E. Smith	Bardwell	September 7
Carroll	H. Carl Boylen	Carrollton	
Carter	Don E. Wilder	Grayson	September 14
Casey	Wm. J. Sweeney	Liberty	September 23
Christian	H. B. Stone	Hopkinsville	September 21
Clark	W. Carl Grant	Winchester	September 17
Clay	L. H. Wagers	Manchester	
Clinton	S. F. Stephenson	Albany	September 18
Crittenden	C. G. Moreland	Marion	September 13
Cumberland	W. F. Owsley	Burkesville	September 1
Daviess	W. H. Parker	Owensboro	September 14 & 28
Estill	Virginia Wallace	Irvine	September 8
Fayette	Charles D. Cawood	Lexington	September 14
Fleming	Roy Orsburn	Flemingsburg	September 8
Floyd	Robert Sirkle	Weeksbury	September 29
Franklin	E. K. Martin	Frankfort	September 2
Fulton	John G. Samuels	Hickman	September 8
Gallatin	J. M. Stallard	Sparta	September 16
Garrard	J. E. Edwards	Lancaster	September 16
Grant	Wallace Byrd	Owenton	September 15
Graves	H. H. Hunt	Mayfield	September 7
Grayson	E. B. Deweese	Caneyville	
Green	S. J. Simmons	Greensburg	September 6
Greenup	Virgil Skaggs	Russell	September 10
Hancock	F. M. Griffin	Hawesville	September 6
Hardin	D. E. McClure	Elizabethtown	September 9
Harlan	W. R. Parks	Harlan	September 18
Harrison	W. B. Moore	Cynthiana	September 6
Hart	Vinson Corroa	Munfordville	September 7
Henderson	Walter L. O'Nan	Henderson	September 13 & 27
Henry	Owen Carroll	New Castle	September 9
Hickman	H. E. Titsworth	Clinton	September 2
Hopkins	Wm. H. Garnier	Madisonville	September 9
Jefferson	Herman Mahaffey	Louisville	September 6 & 20
Jessamine	J. A. VanArsdall	Nicholasville	September 23
Johnson	Paul B. Hall, Act. Sec.	Paintsville	September 27
Knox	T. R. Davies	Barbourville	September 16
Laurel	Oscar D. Brock	London	September 8
Lawrence	L. S. Hayes	Louisa	September 20
Lee	A. B. Hoskins	Beattyville	September 11
Letcher	Bert C. Bach	Whitesburg	September 28
Lewis	Elwood Esham	Vanceburg	September 20
Lincoln	Lewis J. Jones	Hustonville	September 17
Livingston	T. L. Radcliffe	Smithland	
Logan	E. M. Thompson	Russellville	September 1
Lyon	H. H. Woodson	Eddyville	September 7
McCracken	Leon Higdon	Paducah	September 22
McCreary	R. M. Smith	Stearns	September 6
McLean	F. L. Johnson	Livermore	September 9
Madison	Max E. Blue	Richmond	September 16
Magoffin	Lloyd M. Hall	Salyersville	
Marion	Nelson D. Widmer	Lebanon	September 28
Marshall	S. L. Henson	Benton	September 15

COUNTY	SECRETARY	RESIDENCE	DATE
Mason	C. W. Christine	Maysville	September 8
Menifee	E. T. Riley	Frenchburg	
Mercer	J. Tom Price	Harrodsburg	September 14
Metcalfe	E. S. Dunham	Edmonton	
Monroe	Geo. E. Bushong	Tompkinsville	
Montgomery	John M. Prewitt	Mt. Sterling	September 14
Muhlenberg	Claude Wilson	Greenville	September 14
Nelson	Keith Crume	Bardstown	September 15
Nicholas	T. P. Scott	Carlisle	September 20
Obio	Oscar Allen	McHenry	September 1
Owen	K. S. McBee	Owenton	September 2
Owsley	W. H. Gibson	Booneville	September 6
Perry	Lewis C. Coleman	Hazard	September 13
Pike	S. B. Casebolt	Pikeville	September 2
Powell	I. W. Johnson	Stanton	September 6
Pulaski	Robert G. Richardson	Somerset	September 9
Robertson	Logan T. Lanham	Mt. Olivet	
Rockcastle	Robert G. Webb	Livingston	September 3
Rowan	I. M. Garrad	Morehead	September 13
Russell	J. R. Popplewell	Jamestown	September 13
Scott	A. F. Smitb	Georgetown	September 2
Shelby	C. C. Risk	Shelbyville	September 16
Simpson	N. C. Witt	Franklin	September 14
Spencer	M. H. Skaggs	Taylorsville	
Taylor	L. S. Hall	Campbellsville	September 9
Todd	B. E. Boone, Jr.	Elkton	September 1
Trigg	Elias Futrell	Cadiz	
Union	E. Bruce Underwood	Morganfield	September 7
Warren-Edmonson	John H. Blackburn	Bowling Green	September 8
Washington	J. H. Hopper	Willisburg	September 15
Wayne	Frank L. Duncan	Monticello	
Webster	C. M. Smitb	Dixon	September 24
Whitley	C. A. Moss	Williamsburg	September 2
Wolfe	John L. Cox	Campton	September 1
Woodford	George H. Gregory	Versailles	September 2

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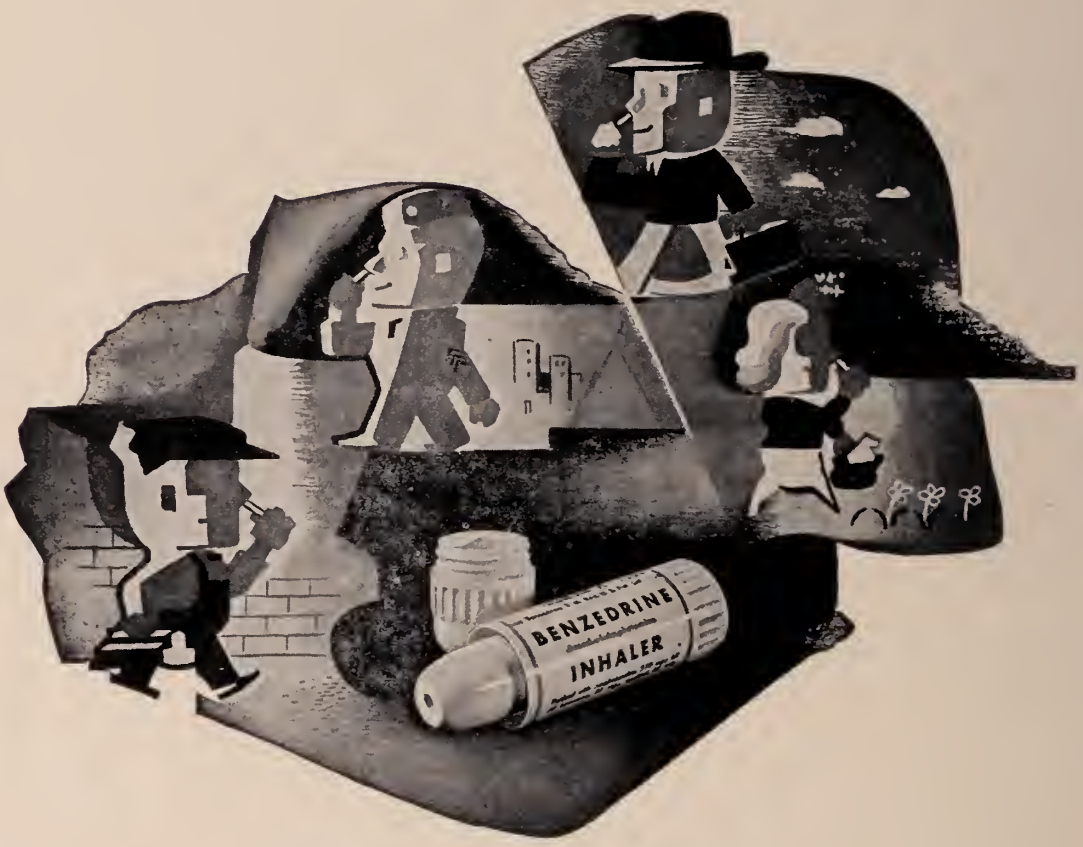
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KENTUCKY MEDICAL JOURNAL

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

VOL. 41, NO. 9 BOWLING GREEN, KY. SEPTEMBER, 1943

Arthur Thomas McCormack

1872 - 1943

The sudden death of our beloved Secretary-Editor came as a shock to the physicians of Kentucky. Few knew he had serious heart disease, which dated back to 1934. He rarely complained, though he often jokingly referred to the fact that he was taking capsules, contents unknown to him, which had been prescribed by his physician. His work was his life, and the knowledge that he had serious cardiac involvement did not deter him from continuing his manifold duties, day and night, through floods, depressions, and epidemics. He said the day before his death, "If the present aggravation of my symptoms means that I must cease to serve, life holds nothing and I want to die."

The space at my disposal at present will not permit a review of all the numerous and important achievements of Dr. McCormack. However, it is hoped that a memorial number of this Journal may be issued later, which will commemorate his life and work.

The only child of Dr. Joseph Nathaniel and Corinne Crenshaw McCormack, Arthur Thomas, was born at Howard's Mill, Nelson County, Kentucky, on August 21, 1872. In May, 1875, Dr. Joseph N. McCormack moved to Bowling Green, where Arthur received his early education. He next entered Ogden College (Bowling Green) and was graduated with an A. B. degree in 1892. He then took a year of post-graduate academic work at the University of Virginia, (1892-93). Immediately thereafter he began the study of medicine in his father's office and then went to Columbia University, where he received his M. D. degree in 1896. Returning home after a year's internship, at Paterson General Hospital, Paterson, N. J. he began the practice of medicine and surgery in association with his father. Dr. Arthur soon became interested in public health work and was made health officer of Warren County in 1897 and Assistant Secretary of the Kentucky State Board of Health in 1898. With the passing of years, he devoted more and more time to public health duties and, in 1912, relinquished his surgical work. When his father, who had served as Secretary of the State Board of Health since 1883, retired in 1912, the son succeeded him.

After enactment of the bill in 1918 consolidating the health agencies of the state, Dr. Arthur was appointed State Health Officer, later designated as Commissioner of Health, and continued his duties as Secretary of the Kentucky State Board of Health. From this period on the steady growth of the State Board of Health seemed to move with a swifter pace. The small office in Bowling Green had been outgrown, which necessitated removal to the large building at Sixth and Main Streets, Louisville, in 1919. But this building soon became inadequate, and still larger quarters were obtained at 620 South Third Street, which were occupied and dedicated in 1938. Here the foresight of Dr. McCormack became apparent because he had insisted on including an adjoining vacant lot in the deal for the Third Street property. Upon this vacant lot an addition, which doubled the office space of the State Board, was erected in 1942.

Dr. McCormack joined the Kentucky State Medical Association upon his graduation from Medical College and never missed a meeting during the 47 years of his membership. In 1907 he was elected Secretary of our Association and became Editor of the

Kentucky Medical Journal. The progress of the Association since then discloses his ability. If any article submitted for publication did not measure up to certain standards or if, for some other reason, its publication was deemed inadvisable, he had a friendly and sympathetic way of refusing publication. He seemed to realize fully that essays were the "children," often born in midnight travail, of the authors and hence beloved regardless of their uncouth nature.

Everything that he did was done conscientiously and to the best of his ability. He had the happy faculty of securing the utmost cooperation and loyalty from his associates. His motto seemed to be "service" and, in serving his brother physician and his brother layman in public health activities, he was serving his Creator. He often referred to himself as a servant, and he did everything in an unselfish spirit. Critics he had, critics often jealous of his power, but these could be brushed aside because he knew his own motives were above reproach.

His illness started in 1934, when he began having attacks of angina pectoris. Electrocardiograms revealed evidence pointing toward relatively advanced coronary sclerosis. He was willing to reduce his smoking markedly, to follow a diet and rest after meals, to take regularly any prescribed medicine without question; but he was unwilling to spare himself in the discharge of his duties. His desire to serve his fellow man took precedence over all else, and this, to me, was a revelation of the power of pure and unselfish love. The anginal syndrome responded nicely to proper medication, and he experienced only occasional attacks until a week before his death. At this time the attacks began to recur with great frequency even when at rest. Absolute rest in bed for at least a month was advised, but he died instantly in an attack at 7:00 p. m. in his apartment at the Brown Hotel, Louisville, on Saturday, August 7, 1943. His will specified that an autopsy be performed, and this disclosed wide-spread coronary sclerosis.

The loss to Kentucky and to the nation sustained by his death is great. Those who assume his duties should try to emulate his example and remember that his motto was service, conscientious service to his fellow men.

EMMET F. HORINE

THE ANNUAL MEETING

The Jefferson County Medical Society at the request of the Council has decided to curtail, to a minimum, the entertainment during the Annual Meeting October 4, 5 and 6th. However, despite the fact that about forty percent of the members of the Jefferson County Medical Society are in service in the armed forces, there will be a subscription dinner Tuesday evening at 6:30 P. M. at the Brown Hotel. This dinner meeting will be followed immediately by an open meeting with addresses by guest speakers whose subjects will be announced in the official program.

The Scientific program for the meeting will be presented largely by a special faculty, representing the American Medical Association, American College of Surgeons and the American College of Physicians. Physicians in the armed forces who are stationed in Kentucky will be special guests of the Association.

The Jefferson County Medical Society is fully conscious of its obligations as host during this emergency period, and will welcome physicians from the state and neighboring states to a scientific program, which promises to be as good if not better, than the best we have ever had.

EXHIBITS

The extraordinary demands on time and energy occasioned by the present emergency, should not be permitted to interfere with the success of the approaching Annual Meeting of the Kentucky State Medical Association. The dissemination of knowledge is absolutely essential to the continued advancement of medical science. If you have any exhibit or demonstration calculated to contribute to this end, you owe it to your profession, as well as to yourself, to pass it on to others.

Applications for exhibit or demonstration space should include character of the exhibit or demonstration, wall or floor space required, and lighting facilities needed. Applications should be forwarded without delay to Dr. H. M. Weeter, The Heyburn Building, Louisville, Chairman of the Committee on Exhibits, of which the others members are Charles W. White, Henderson and Charles W. Kavanaugh, Lexington.

HOTEL RESERVATIONS

We are again emphasizing the importance of making your hotel reservations for the Annual Meeting, without delay. At the present time Louisville, because of its proximity to Fort Knox and Bowman Field and of the general war emergency, is crowded to capacity. However, physicians desiring accommodations for themselves and families, may rest assured that the reservations will be available, provided they make application early. The headquarters of the Association will be at the Brown Hotel. Reservations may be obtained by writing Dr. M. G. Buckles, Chairman of the Hotel Committee, or directly to the hotel of your choice.

OUR VICE-PRESIDENTS



C. L. Sherman, M. D.
Millwood

Dr. Sherman was born in Aberdeen, Butler County, March 7, 1880 and was reared on his father's farm. He attended and taught in the local County Schools. He was graduated from the University of Louisville School of Medicine in 1904. Immediately he located in Millwood and has served that community all his medical career.



Davis Hunter Coleman, M. D.
Harrodsburg

Davis Hunter Coleman was born at Harrodsburg, August 4, 1892 and received his preliminary education in the Harrodsburg public schools and at Center College, Danville. After two years of medicine at Tulane University, New Orleans, he entered the University of Cincinnati School of Medicine from which he was graduated in 1917. After a residency of one year at the Good Samaritan Hospital, Cincinnati, he entered the Medical Corps of the U. S. Army in which he served during 1918-19. Subsequently he did postgraduate work in New York and Chicago.

Dr. Coleman is a member of the Mercer County Medical Society, Kentucky State Medical Association, Southern Medical Association and the American Medical Association. He has been in the practice of medicine and general surgery at Harrodsburg since 1920.



O. O. Miller, M. D.
Chairman, Program Committee
Louisville

O. O. Miller was Orator in Medicine in 1942 and President of the Jefferson County Medical Society and is now active in teaching Tuberculosis in the Medical Department of the University of Louisville, and was elected by the Council as Chairman of the Program Committee to succeed the late President-Elect, Dr. C. C. Turner.

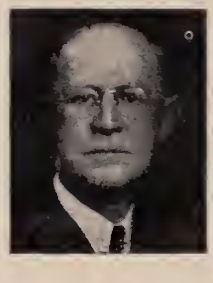
SECRETARY



A. T. McCormack, M. D.
Louisville

Secretary, Kentucky State Medical Association; Editor, Kentucky Medical Journal, and State Commissioner of Health. Delegate to the American Medical Association.

THE TREASURER



A. W. Davis, M. D.

Madisonville

A. W. Davis, M. D., Madisonville, was graduated from Louisville Medical College in 1898. After serving internship in Louisville, he attended clinics in London, Edinburgh and Dublin. Returning to America he enrolled in the New York Post-graduate College and later attended post graduate clinics at Tulane University. He was Captain, Medical Corps of the United States Army, from February, 1918 to May, 1919, and is now Lieutenant Colonel, Medical Corps Reserve.

ORATOR IN SURGERY



Wilson Smock, M. D.

Louisville

Dr. Smock, the second son of the late Dr. B. W. Smock and Nevada Evans, was born in Oakland, Warren County, Kentucky, August 5, 1894. His father, after practicing medicine in Warren County for eight years, moved to Louisville to establish practice and, later, to become the first full-time county health officer in the United States. He was very active in the organization of the Kentucky State Medical Association and served as its Vice-President in 1894.

Dr. Wilson Smock received his preliminary education in the public schools of Louisville, the Kentucky Military Institute and Culver Military Academy. Graduating from the Louisville Male High School in 1913, he entered the University of Louisville School of Medicine, receiving the degree of M. D. from that institution in 1918. He interned at the Louisville City Hospital and served six months as Chief Resident.

After serving for eight months as Director of Public Health and First Aid for the Lake Division of the American Red Cross, Dr. Smock entered practice in Muhlenberg County, where he was located for four years. Moving to Louisville in 1925, he became actively engaged in the practice of surgery. For nine years he was associated with and assistant to the late Dr. B. F. Zimmerman.

Upon America's entrance into World War I, Dr. Smock enlisted in the U. S. Army, receiving his honorable discharge in 1919.

Dr. Smock is a member of the Jefferson County Medical Society, of which he has served both as President and Secretary, and of the Kentucky State Medical Association, of which he is a past Vice-President. He is also a member of the Louisville Society of Medicine, and has been a delegate to the State Medical Association for a number of years.

ORATOR IN MEDICINE

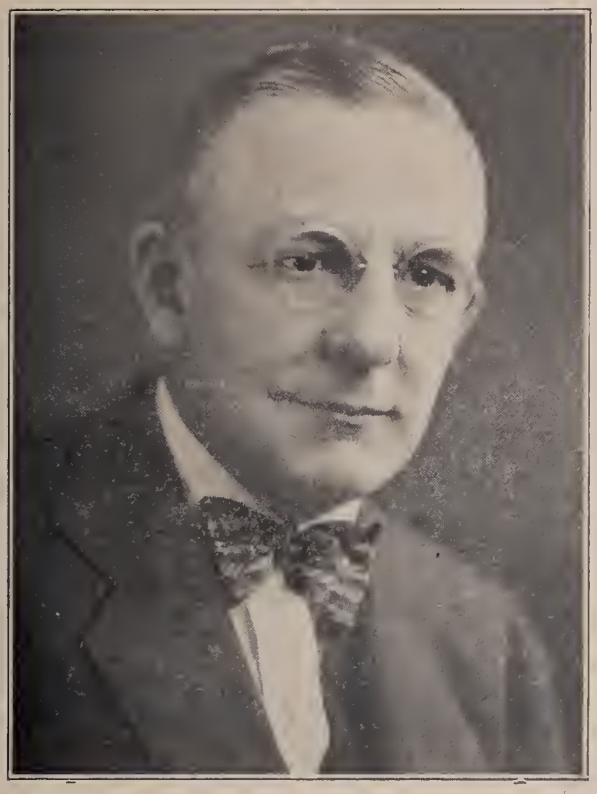


Charles B. Stacy, M. D.

Pineville

Dr. Stacy was born in Cannell City, Morgan County, January 18, 1901. After graduation at Berea College he entered the Medical Department of the University of Louisville and was graduated in 1926. After completing his internship at the U. S. Marine Hospital, New Orleans, he was commissioned Assistant Surgeon in the U. S. Public Health Service. In 1927 he resigned his commission to enter private practice in Pineville. He is a member of the surgical staff of the Pineville Community Hospital. His hobby is hunting.

SOME OF OUR GUEST SPEAKERS



HERMAN L. KRETSCHMER, M. D.
President-Elect, American Medical Association
Chicago

Herman Louis Kretschmer, Chicago, President-Elect of the American Medical Association, received the degree of doctor of medicine from Northwestern University Medical School in 1904, from which date he has devoted himself continuously to the advancement of his chosen profession. He became urologist of the Presbyterian Hospital, attending urologist to the Children's Memorial Hospital and clinical professor of surgery in Rush Medical College. From the beginning of his career he became associated with practically all organizations in his specialty, serving as President of the American Board of Urology, chairman and secretary of the Section on Urology of the American Medical Association, president of the American Urological Association, president of the American Association of Genito-Urinary Surgeons and president of the Clinical Society of Genito-Urinary Surgeons. For more than ten years he devoted himself in the American Medical Association to his work as treasurer, sitting regularly with the Board of Trustees and giving invaluable advice in the field of investments. He is a fellow of the American College of Surgeons and the American Radium Society. In 1942 he was cited by Northwestern University School of Medicine as one of its distinguished alumni.



BRIGADIER GENERAL F. W. RANKIN
Chief Consulting Surgeon, U. S. Army
Lexington

Dr. Rankin, Lexington, is President of the American Medical Association and is Consulting Surgeon U. S. Army, with headquarters in Washington. He is now touring the battlefields in Europe and the East. His wealth of experience gleamed during this visit will be recounted at our annual meeting.



BRIGADIER GENERAL DAVID N. W. GRANT

Brigadier General Grant received his M. D. from the University of Virginia, School of Medicine, in 1915 and interned for one year at the Providence Hospital, Washington, D. C., entering the Medical Reserve Corps in February 1916. He was placed on active duty the following July. In 1918 he was promoted to Major and spent the following year taking a special course in Surgery at Rockefeller Institute. In 1919 he was Executive Officer at General Hospital No. 31; commanded the Sanitary train for the Army of Occupation to Mayen, Germany, and in 1920-1922 in command of the Station Hospital at Coblentz, Germany. In 1940 he was sent to England as Medical

Military Air Observer, and since that time has made special trips to all of the war fronts.

In February 1943 he was promoted to Colonel and is serving at present as temporary Brigadier General.

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

VIRGIL E. SIMPSON, M. D.
Louisville

Dr. Virgil E. Simpson, a native of Jefferson County, Kentucky, was born in 1875, and graduated from the University of Louisville with a degree of A.B in 1897 and a degree of M. D. in 1900. He did post-graduate work at Johns Hopkins University, University of Toronto, Cleveland Clinic, Harvard University and the Massachusetts General Hospital. He taught in the public schools of Kentucky from 1894 to 1896 and in the College of Liberal Arts, University of Louisville, 1906-1907, and has been a member of the faculty of the University of Louisville School of Medicine since 1903, occupying at present the Chair of Clinical Professor of Medicine.

Dr. Simpson holds memberships in the American Heart Association, American Association for the Study and Prevention of Goiter, Southern Medical Association, American College of Physicians, Jefferson County Medical Society, Kentucky State Medical Association and the American Medical Association. He has been a frequent contributor to various medical journals throughout the United States.

The biographies of Dr. A. T. McCormack and Dr. J. B. Lukins, also delegates to the American Medical Association, appear on other pages of this issue.

THE COUNCILORS



FIRST DISTRICT
VAN ALBERT STILLEY. M. D.
Benton

Dr. Stilley was born in Concord, Calloway County, May 19, 1866. Educated at Benton Seminary, 1880-1884; Evansville Commercial College 1885; Medical Department University of Louisville, 1888-90; Post-Graduate University of Louisville 1895. Chicago Polyclinic 1907. Secretary Marshall County Medical Society 1890-1905; President in 1906. Health Officer Marshall County, 1893-1924. Member of Draft Board 1917-1918. Official Examiner Military C. M. T. C. Member State Board of Health 1924-1927; Councilor Kentucky Medical Association, 1922-1939. Chairman Committee of Public Instruction and Legislation, Kentucky State Medical Association; Director of Public Health 1927. Member of Marshall County Medical Society, Southwestern Kentucky Medical Association, Secretary 1901-1907; President 1908; member Kentucky Medical Association, Southern Medical Association, American Medical Association, Knight Templar, Shriner.

SECOND DISTRICT



E. L. GATES, M. D.
Greenville

Dr. E. L. Gates was born in Todd County, in September, 1877. His early education was in the public and private schools at Kirkmansville. He taught in County Schools for five years and entered medical college in 1899 at University of Nashville and graduated from the Hospital College of Medicine in Louisville in 1903. Has had post graduate work in Chicago and Tulane University. He located in Christian County and practiced there sixteen years, then moved to Greenville. He was part-time Health Officer for two years, then helped to organize a whole-time department and has been member of Board since its organization. He served a term on State Board of Health and was elected Councilor of Second District in 1943.

THIRD DISTRICT

Dr. C. C. Howard, Glasgow, was graduated from the Medical Department University of Louisville in 1911 and upon the completion of his internship in 1912 he



C. C. HOWARD, M. D.
Glasgow

located in Glasgow where he has been to the present time with the exception of the time served in the Army during War No. 1, eight months of which were spent in France. He was elected President of the Kentucky State Medical Association in 1935; Vice-President of the Southeastern Surgical Congress in 1936; Member of American College of Surgeons, Southern Medical and American Medical Associations. He operated a private hospital for ten years and at the present time is Senior Surgical Member of the staff of Samson Community Hospital, Glasgow.

FOURTH DISTRICT

Dr. Greenwell was born in Balltown, Nelson County, November 27, 1873 and received his early education in the public schools of Balltown, and his B. A. degree from Cecelia College in Hardin County, and his Master's Degree from the same college in 1895. He matriculated in the Louisville Hospital College of Medicine where he won the degree of M. D. in 1900, and at once located in New Haven where he has practiced his profession continuously until the present time. Dr. Greenwell has given his support to the Democratic party, is a Roman Catholic, and belongs to the New Haven Council, No. 2208, Knights of Columbus. He is a member of the Nelson County Medical Society, the Kentucky State Medical Association and is serving on the County Board of Health. He is also a member of the American Medical Association. To Dr. and Mrs. Greenwell have been born twelve children.

Dr. Greenwell is a Director and Vice-President of the Bank of New Haven and has shown a deep interest in everything affecting the prosperity and progress of his community. Kind and sympathetic in



J. I. GREENWELL, M. D.
New Haven

disposition, he has the faculty of inspiring confidence in his patients and to an unusual degree he has been successful in the practice of his profession and is regarded as one of the leading physicians of Nelson County.

FIFTH DISTRICT

Dr. J. B. Lukins was born in Fleming County, November 4, 1881, the son of J. P. and Mary Lukins. He received his education in the Fleming County schools and the Flemingsburg Graded High School and his medical education at the Hospital College of Medicine, Louisville, from which he was graduated in 1906. He received an appointment as intern at the Louisville City Hospital where he served for one year. Immediately upon completion of this



J. B. Lukins, M. D.
Louisville

service, he located in Louisville. He took post-graduate work at the Mayo Clinic, and was resident in surgery at Bellevue Hospital, New York, in 1919. He has been a member of the faculty at the Medical College of the University of Louisville since his graduation, and since 1937 has been Associate Professor of Gynecology and Abdominal Surgery. He served as First Lieutenant in the United States Army during the first World War through 1918 and to April, 1919. He is a Fellow of the American College of Surgeons and the Southeastern Surgical Congress, and a member of the Jefferson County Medical Society, the Kentucky State Medical Association, the Southern Medical Association, and the American Medical Association. He is past president of Kentucky State Medical Association and also a delegate to the American Medical Association.

SIXTH DISTRICT



Major W. B. Atkinson, M. D.
Campbellsville

Dr. Atkinson was born in Campbellsville, March 7, 1896 and is the son of J. L. Atkinson, M. D. and Lena Reno Atkinson. He received his B. S. degree from Georgetown College in 1917 and graduated from the Jefferson Medical College, Philadelphia, in 1921, with an M. D. degree. Elected to Council at Harlan, 1934, to fill the unexpired term of R. C. McChord, and was re-elected at Paducah in 1936.

He is a member of Taylor County Medical Society; Kentucky State Medical Association, American Medical Association, Southern Medical Association, Muldraugh Hill Medical Society, and Southeastern Surgical Congress. He is local surgeon for the Louisville and Nashville Railroad Company.

He is now Major, Medical Corps, State Medical Officer.

SEVENTH DISTRICT



Virgil G. Kinnaird, M. D.
Lancaster

Dr. Virgil Gibney Kinnaird was born at Lancaster, October 15, 1890. He received his education at the Lancaster graded and high schools, and attended Centre College one year. He spent two years at the University of Louisville Medical School, and transferred to Jefferson Medical College, from which he received his degree of Medicine in 1913. He served two years internship at Kings County Hospital, Brooklyn, New York. Went overseas with Base Hospital No. 40. Entered service at Fort Riley, Kansas, July 1917, as First Lieutenant; discharged Major, Medical Corps, July 1919. Dr. Kinnaird returned to Lancaster and entered the general practice of medicine and surgery. He was elected to the Council for the Seventh District in 1922.

EIGHTH DISTRICT



J. M. Blades, M. D.
Butler

Dr. J. M. Blades was born at Powersville, Bracken County. He was educated in the county schools, and taught in county schools until he decided to study medicine. He received his M. D. Degree from the Hospital College of Medicine, Louisville, in 1904 and a Post Graduate course at Louisville University in 1907. He began his practice in Scott County. Then he established a practice at California, Campbell County for eight years, when he moved to Butler, 1913. He has been twice elected President of the Licking Valley Medical Association, also served as President of the Bracken-Pendleton County Medical Society. He is a member of the State and Southern Medical Associations and attends them regularly; also, is a member of the Pendleton County Health Board, Examiner for the County Selective Service Board of Pendleton County. For fifteen years was President of the Butler County Board of Education, and is now a member of Butler Town Board, a member of the Board of Deacons, Butler Baptist Church, also a member of Masons. He is physician and surgeon for the L. & N. R. R. He was elected as Councilor for the Eighth District to fill out the unexpired term of Dr. Harper, who is in the Army.

NINTH DISTRICT

Dr. Sparks was born June 7, 1890 at Martha, son of Judge Meredith B. Sparks and Alice Sparks. He received his early educational training at Blaine, Kentucky, and at the Louisa Normal Institute at Louisa.

He was married June 10, 1908 to Mary Gambill and later had two daughters, Joy and Irene. He taught one year at Martha, after which he studied at Draughon's Business College, Knoxville, Tennessee, and then served four years as cashier at the Bank of Blaine.

At this time he was able to satisfy his burning desire to study medicine, and went to the Louisville Medical College where he received his M. D. degree in 1917. He has done post-graduate work at Chicago, Harvard and Louisville in Pediatrics and Anesthesia. Dr. Sparks has been engaged in the general practice of medicine in Ashland for the past seventeen years.



Proctor Sparks, M. D.
Ashland

Here he has served as Chairman of the Advisory Board of the Salvation Army, Director of the First Federal Savings and Loan Association, and Alderman on the Ashland City Council. He is a Mason, Shriner, and belongs to the I. O. O. F., and the Ashland Lions Club.

TENTH DISTRICT

Dr. C. A. Vance was born in Lexington, March 23, 1880; attended public schools and Hamilton College; graduated with an A. B. degree Transylvania College, 1900; received M. A. degree in 1903 also from Transylvania; M. D. degree from the University of Louisville Medical Department. Interned St. Joseph's Infirmary 1903 and 1904. Substitute interne at the New York Hospital, Hudson Street Hospital, Mount Sinai Hospital, New York City, and St. John's Riverside Hospital, Yonkers, New York, June 1904 to January, 1905; Hudson Street Hospital, New York, January, 1905 to July, 1906; St. John's Guild Children's Hospital, Staten Island and Manhattan Maternity Hospital, New York City until January, 1907. Began practice in Lexington January, 1907.

He was Captain in the Medical Corps, U. S. Army from September, until after Christmas, 1918, stationed at Camp Greenleaf, Chickamauga Park, Georgia. He has confined his practice to general surgery since July 1, 1919. He is consulting surgeon for St. Joseph Hospital, Lexington; Consulting Surgeon for Veterans Administration Hospital, Lexington, and attending



CHARLES A. VANCE, M. D.
Chairman of the Council
Lexington

Surgeon, Good Samaritan Hospital, Lexington. He is a member of the Fayette County Medical Society; Kentucky State Medical Association; American Medical Association; Southern Medical Association; Fellow of the Southern Surgical Association; Fellow of the American College of Surgeons; Fellow of the American Society of Traumatic Surgery, and certificate from American Board of Surgery. He was elected Councilor for the Tenth District at the Owensboro meeting in 1925 and Chairman of the Council at the Lexington meeting, 1931.

ELEVENTH DISTRICT



HARRY KING BUTTERMORE, M. D.
Liggett

Dr. Buttermore was born at Connellsville, Pennsylvania, February 18, 1893. He was graduated from the University of Louisville School of Medicine in 1907, and served as intern and Resident Surgeon at Braddock General Hospital, Braddock, Pennsylvania; did post-graduate work at the University of Pittsburgh, and is a Past President of the Harlan County Medical Society and Cumberland Valley Medical Society. He has served as Councilor of the Eleventh District since 1933.

OFFICIAL ANNOUNCEMENTS

PRELIMINARY PROGRAM
KENTUCKY STATE MEDICAL ASSOCIATION
LOUISVILLE
OCTOBER 4, 5, 6, 1943

In the Editorial under the title "The Annual Meeting," the members of the Association were advised of the plans that were to be worked out for the meeting to be held in Louisville, October 4, 5, 6. We quote as follows from this Editorial:

"This meeting will be conducted in conformity with plans sponsored by the American Medical Association, the American College of Physicians and the American College of Surgeons, and approved by the Surgeons General of the Army, Navy and Public Health Service."

In keeping with this, the Committee on Scientific Program desires to call attention to the fact that such outstanding medical men as the following will make contributions: Brig. Gen. Fred Rankin, Brig. Gen. David N. W. Grant, Herman Louis Kretschmer, M. D., Chicago, Ill. (President Elect A.M.A.), Arthur W. Allen, M. D., Boston, Mass., Warren H. Cole, M. D., Chicago, Ill.

The tentative program, subject to revision is as follows:

TUESDAY, OCTOBER 5, 1943
9:30 A. M. to 12:00 Noon

A. Burns, Shock, Blood Derivaties.

12:00 Noon

Oration in Medicine.

2:00 to 5:00 P. M.

B. Chemotherapy.
- I Prevention and Treatment of Wound Infections with Sulfonamides.
- II Treatment of Bacterial Meningitis.
- III Treatment of Gastrointestinal and Genitourinary Infections.

WEDNESDAY, OCTOBER 6, 1943
9:30 A. M. to 12:00 Noon

C. General Surgery.
- I Peptic Ulcer.
- II Gas Gangrene.
- III Intestinal Obstruction.
- IV Nucleus Pulposus, Appendicitis, Abscess and Perforation.

12:00 Noon

Oration in Surgery.

1:30 to 5:30 P. M.

D. The Dysenteries.
I Classification.
II Bacillary Dysentery.
III Amebiasis.
IV Other Intestinal Protozoal Infections.
V Helmunthous Dysentery.

JEFFERSON COUNTY MEDICAL SOCIETY

COMMITTEES FOR KENTUCKY STATE MEDICAL ASSOCIATION MEETING 1943

RECEPTION COMMITTEE:
Irvin Abell, Chairman
Guy Aud
Misch Casper
W. E. Gardner
E. L. Henderson
M. J. Henry
J. B. Lukins

ENTERTAINMENT COMMITTEE:
Harry M. Weeter, Chairman
Herman Mahaffey
E. L. Shiflett
L. H. South

FINANCE COMMITTEE:
I. T. Fugate, Chairman

MEETING PLACE COMMITTEE:
Uly H. Smith, Chairman
Harry S. Frazier
F. W. Urton

HOTEL COMMITTEE:
Maurice G. Buckles, Chairman
C. Wm. Dowden, Jr.
M. H. Pulskamp

AUTOMOBILE COMMITTEE:
Frank P. Strickler, Chairman
C. W. Jefferson
Ira N. Kerns

BADGE COMMITTEE:
Esther C. Wallner, Chairman
Jos. S. Parker
Alice Wakefield

PUBLICITY COMMITTEE—PRESS:
John G. Clem, Chairman

PUBLICITY COMMITTEE—RADIO:
James Robert Hendon, Chairman
Rudy F. Vogt

FRATERNITY LUNCHEON COMMITTEE:
Dougal M. Dollar, Chairman
Chas. W. Hibbitt
J. Allen Kirk

HOBBIES COMMITTEE:
Richard T. Hudson, Chairman
H. Arch Herzer
Sydney E. Johnson
James E. Winter

WOMEN PHYSICIANS COMMITTEE:
Frieda Berresheim, Chairman
Mary Miller Furnish

WOMAN'S AUXILIARY COMMITTEE:
O. H. Kelsall, Chairman
Lanier Lukins

OFFICIAL CALL

THE KENTUCKY STATE MEDICAL ASSOCIATION TO BE HELD IN THE BROWN HOTEL LOUISVILLE

To the officers and members of the Component County Societies of the Kentucky State Medical Association:

The C. P. Mattingly Memorial Meeting of the Kentucky State Medical Association will convene in the Brown Hotel, Louisville, Monday, Tuesday and Wednesday, October 4, 5, 6, 1943.

THE HOUSE OF DELEGATES

The House of Delegates will convene in the Louis XVI Room of the Brown Hotel at 10:00 A. M. and at 7:30 P. M., Monday, October 4, 1943.

THE COUNCIL

The Council will convene in the Louis XVI Room of the Brown Hotel, Monday, October 4, at 9:00 A. M.

THE FIRST SESSION

The First General Session which constitutes the opening exercises of the scientific function of the Association will be held in the Ball Room of the Brown Hotel, Tuesday. October 5 at 9:00 A. M.

REGISTRATION

The Registration Department will be open in the South Room, Mezzanine from 10:00 A. M. to 5:00 P. M. on Monday, October 4; from 8:30 A. M. to 5:00 P. M. Tuesday, October 5 and Wednesday, October 6, from 8:30 A. M. to 11:00 A. M.

COUNCILOR DISTRICTS

FIRST DISTRICT

V. A. Stilley, Benton, Councilor

Ballard	Fulton	Lyon
Caldwell	Graves	McCracken
Calloway	Hickman	Marshall
Carlisle	Livingston	Trigg
Crittenden		

SECOND DISTRICT

E. L. Gates, Greenville, Councilor

Daviess	Hopkins	Ohio
Hancock	McLean	Union
Henderson	Muhlenberg	Webster

THIRD DISTRICT

C. C. Howard, Glasgow, Councilor

Allen	Cumberland	Simpson
Barren	Logan	Todd
Butler	Metcalfe	Warren-Edmonson
Christian	Monroe	

FOURTH DISTRICT

J. I. Greenwell, New Haven, Councilor

Breckinridge	Hardin	Meade
Bullitt	Hart	Nelson
Grayson	Larue	Spencer

FIFTH DISTRICT
J. B. Lukins, Louisville, Councilor

Carroll	Henry	Owen
Franklin	Jefferson	Shelby
Gallatin	Oldham	Trimble

SIXTH DISTRICT
W. B. Atkinson, Campbellsville, Councilor

Adair	Green	Taylor
Anderson	Marion	Washington
Boyle	Mercer	

SEVENTH DISTRICT
V. G. Kinnaird, Lancaster, Councilor

Casey	Lincoln	Rockcastle
Clinton	McCreary	Russell
Garrard	Pulaski	Wayne

EIGHTH DISTRICT
J. M. Blades, Butler, Councilor

Boone	Fleming	Mason
Bracken-Pendleton	Grant	Nicholas
Campbell-Kenton	Harrison	Robertson

NINTH DISTRICT
Proctor Sparks, Ashland, Councilor

Boyd	Greenup	Magoffin
Carter	Johnson	Martin
Elliott	Lawrence	Pike
Floyd	Lewis	

TENTH DISTRICT
C. A. Vance, Lexington, Councilor

Bath	Jessamine	Owsley
Bourbon	Lee	Powell
Breathitt	Madison	Rowan
Clark	Menifee	Scott
Estill	Montgomery	Wolfe
Fayette	Morgan	Woodford

ELEVENTH DISTRICT
H. K. Buttermore, Liggett, Councilor

Bell	Knox	Letcher
Clay	Knott	Perry
Harlan	Laurel	Whitley
Jackson	Leslie	

CONSTITUTION AND BY LAWS OF THE KENTUCKY STATE MEDICAL ASSOCIATION ADOPTED AT PADUCAH IN 1902 AS AMENDED

CONSTITUTION

Article I. Name of the Association

The name and title of this organization shall be the Kentucky State Medical Association.

Article II. Purpose of the Association

The purpose of the Association shall be to federate and bring into compact organization the entire medical profession of the State of Kentucky and to unite with similar associations in other states to form the American Medical Association, with a view to the extension of medical knowledge, and to the advancement of medical science, to the elevation of the standard of medical education and to the enactment and enforcement of just medical laws; to the promotion of friendly intercourse among physicians, and to the guarding and fostering of their material interest and to the enlightenment and direction of public opinion in regard to the great problem of state medicine, so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

Article III. Component Societies

Component societies shall consist of those county medical societies which hold charters from this Association.

Article IV. Composition of the Association

Section 1. This Association shall consist of Members, Delegates and Guests.

Section 2. Members. The members of this Association shall be the members of the component county medical societies.

Section 3. Delegates. Delegates shall be those members who are elected in accordance with this Constitution and By-laws to represent their respective component county societies in the House of Delegates of this Association.

Section 4. Guests. Any distinguished physician not a resident of this State may become a guest during any Annual Session upon invitation of the Association or its Council, and shall be accorded the privilege of participating in all of the scientific work of that session.

Article V. House of Delegates

The House of Delegates shall be the legislative and business body of the Association, and shall consist of (1) Delegates elected by the component county societies, (2) *ex-officio,* the officers of the association as defined in Article VIII, Section 1, of this Constitution and (3) the five immediate past presidents.

Article VI. Sections and District Societies

The House of Delegates may provide for a division of the scientific work of the Association into appropriate Sections and for the organization of such Councilor District Societies as will promote the best interest of the profession, such societies to be composed exclusively of members of component county societies.

Article VII. Sessions and Meetings

Section 1. The Association shall hold an Annual Session, during which there shall be held daily not less than two General Meetings, which shall be open to all registered members, delegates and guests.

Section 2. The time and place for holding each annual session shall be fixed by the House of Delegates.

Article VIII. Officers

Section 1. The officers of this Association shall be a President, President-Elect, three Vice-Presidents, a Secretary, a Treasurer, and eleven Councilors.

Section 2. The President-Elect and the Vice Presidents shall be elected for a term of one year. The Secretary, Treasurer

and Councilors shall be elected for terms of five years each; the Councilors being divided into classes so that two shall be elected each year except for each fifth year when three shall be elected. All these officers shall serve until their successors have been elected and installed.

Section 3. The officers of the Association shall be elected by the House of Delegates on the last day of the Annual Session but no Delegates shall be eligible to any office named in the preceding section, except that of Councilor and no person shall be elected to any such office who is not in attendance upon the Annual Session, and who has not been a member of the Association for the past two years.

Article IX. Funds and Expenses

Funds for meeting the expenses of the Association shall be arranged for by the House of Delegates by an equal per capita assessment upon each county society to be fixed by the House of Delegates, by voluntary contribution, and from the profits of its publication. Funds may be appropriated by the House of Delegates to defray the expenses of the Annual Session, for publication and for such other purposes as will promote the welfare of the Association and profession.

Article X. Referendum

The General Meeting of the Association may, by a two-thirds vote, order a general referendum upon any question pending before the House of Delegates, and the House of Delegates may, by a similar vote of its own members, or after a like vote of the General Meeting, submit any such question to the membership of the Association for a final vote; and if the persons voting shall comprise a majority of all the members, a majority of such vote shall determine the question and be binding upon the House of Delegates.

Article XI. The Seal

The Association shall have a common Seal with power to break, change or renew the same at pleasure.

Article XII. Amendments

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at that Annual Session, provided that such amendment shall have been presented in open meeting at the Previous Annual Session, and that it shall have been sent officially to each component county society at least two months before the session at which final action is to be taken.

BY-LAWS

Chapter 1. Membership

Section 1. The General Meeting shall include all registered members, honorary members and guests who shall have equal right to participate in the scientific proceedings and discussions. Provided, that no physician may become a member of any county society unless he signs and keeps inviolate the following pledge:

I hereby promise upon my honor as a gentleman that I will not so long as I am a member of the Kentucky State Medical Association practice division of fees in any form; neither by collecting fees from others referring patients to me, nor by permitting them to collect fees from me, nor will I make joint fees with physicians or surgeons referring patients to me for operation or consultation; neither will I in any way, directly or indirectly, compensate anyone referring patients to me nor will I utilize any man as an assistant as a subterfuge for this purpose.

Section 2. Honorary Members. Any physician possessed of scientific attainments who is a member of a constituent State Medical Association, and who has participated in the program of the Scientific Session and who is not a citizen of Kentucky, may by unanimous vote of the House of Delegates, be elected to honorary membership. Honorary members shall be entitled to the privilege of the floor in all scientific sessions.

Section 3. The name of a physician upon the properly certified roster of members, or list of delegates, of a chartered county society which has paid its annual assessment, shall be *prima facie* evidence of his right to register at the Annual Session in the respective bodies of this Association.

Section 4. No persons who are under sentence of suspension or expulsion from any component society of this Association, or whose name has been dropped from its rolls of membership shall be entitled to any of the rights or benefits of this Association, nor its proceedings until such time as he has been relieved of such liability.

Section 5. Each member in attendance at the Annual Session shall enter his name on the registration book indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of the society, he shall receive a badge which shall be evidence of his right to all the

privileges of membership at that session. No member or delegate shall take part in any of the proceedings of an annual session until he has complied with the provisions of this section.

CHAPTER II. ANNUAL AND SPECIAL SESSION OF THE ASSOCIATION

Section 1. The Association shall hold an annual session, meeting every third year in the city of Louisville, and the other two years at some point in the State fixed at the preceding annual session.

CHAPTER III. GENERAL MEETING

Section 1. The General Meeting shall include all registered members, delegates, and guests, who shall have equal rights to participate in the proceedings and discussions, and except guests, to vote on pending questions. Each General Meeting shall be presided over by the President or in his absence or disability or upon his request, by one of the Vice-Presidents. Before it, at such time and place as may have been arranged, shall be delivered the annual address of the President, and the annual orations and the entire time of the sessions as far as may be, shall be devoted to papers and discussions relating to scientific medicine.

Section 2. The General Meeting shall have authority to create committees or commissions for scientific investigation of special interest and importance to the profession and public, and to receive and dispose of reports of the same; but any expense in connection therewith must first be approved by the House of Delegates.

Section 3. Except by special vote, the order of exercises, papers and discussions as set forth in the official program shall be followed from day to day until it has been completed.

Section 4. No address or paper before the Association except those of the President and orators shall occupy more than twenty minutes in its delivery; and no member shall speak longer than five minutes, nor more than once on any subject.

Section 5. All papers read before the Association shall be its property. Each paper shall be deposited with the Secretary when read and if this is not done it shall not be published.

CHAPTER IV. HOUSE OF DELEGATES

Section 1. The House of Delegates shall meet annually at the time and place of the Annual Session of the Association and shall so fix its hours of meeting as not to conflict with the first General Meeting of the Association, or with the meeting held for the address of the President and the annual orations so as to give delegates an opportunity to attend the other scientific proceedings and discussions so far as is consistent with their duties. But if the business interest of the association and profession require, it may meet in advance or remain in session after the final adjournment of the General Meeting. The House of Delegates may be called into special session by the President with the approval of the Council and a special session of the House of Delegates shall be called by the President on a written request of the Delegates representing fifty or more component county societies. When such special session is called the Secretary shall mail a notice of the time and place and the purpose of such meeting to the last known address of each member of the House of Delegates at least ten days before such special session.

Section 2. Each component county society shall be entitled to send to the House of Delegates each year one delegate for every twenty-five members, and one for each major fraction thereof, but each county society holding charter from the Association, which has made its annual report and paid its assessments as provided in this Constitution and By-Laws shall be entitled to one delegate. In case the regularly elected delegate or alternate is unable to attend the annual meeting of the Association, the President of the county society may in writing appoint an alternate, who shall have the rights and privileges of a delegate.

Section 3. A majority of the registered delegates shall constitute a quorum and all of the meetings of the House of Delegates shall be open to members of the Association.

Section 4. It shall, through its officers, Advisory Council, and otherwise, give diligent attention to and foster the scientific work and spirit of the Association, and shall constantly study and strive to make each Annual Session a stepping stone to further ones of higher interest.

Section 5. It shall consider and advise as to material interest of the profession, and of the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse popular information in relation thereto.

Section 6. It shall make careful inquiry

into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality and shall continue these efforts until every physician in every county of the State who can be made reputable, has been brought under medical society influence.

Section 7. It shall encourage post-graduate work in medical centers as well as home study and research and shall endeavor to have the results of the same utilized and intelligently discussed in the county societies. With these ends in view, five years after the adoption of the By-Laws, no voluntary paper shall be placed upon the annual program nor be heard in the Association which has not first been read in the county society of which the author is a member.

Section 8. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

Section 9. It shall upon application provide and issue charters to county societies organized to conform to the spirit of the Constitution and By-Laws.

Section 10. In sparsely settled sections it shall have authority to organize the physicians of two or more counties to be designated by hyphenating the names of two or more counties so as to distinguish them from district and other classes of societies and these societies, when organized and chartered shall be entitled to all the privileges and representation provided therein for county societies, until such counties may be organized separately.

Section 11. It may divide the counties of the State into Councilor Districts, and, when the best interests of the Association and profession will be promoted thereby, organize in each district a medical society, to meet midway between the annual sessions of the Association, and members of the chartered county societies and none other shall be members.

When so organized from the presidents of such district societies shall be chosen the Vice-Presidents of this Association and the Presidents of the county societies of the district shall be Vice-Presidents of such district societies.

Section 12. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates and such committees may report to the House of Delegates in person, and may participate in the debate thereon.

Section 13. It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective.

Section 14. It shall present a summary of its proceedings to the last General Meeting of each Annual Session, and shall publish the same in the Journal.

Chapter V. Election of Officers

Section 1. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect, provided, however, that when there are more than two nominees the nominee receiving the least number of votes on the first ballot shall be dropped and the balloting continue until an election occurs in like manner.

Section 2. Any member known to have directly or indirectly solicited votes for, or sought any office within the gift of this Association shall be ineligible for any office for two years.

Section 3. The election of officers shall be the order of business in the House of Delegates on the last day of the General Session.

Section 4. Nominations for President-Elect shall be called for by counties.

Chapter VI. Duties of Officers

Section 1. The President shall preside at all meetings of the Association and of the House of Delegates; shall appoint all committees not otherwise provided for: shall deliver an annual address at such time as may be arranged; shall give a deciding vote in case of a tie, and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the State during his term of office and so far as practicable, shall visit by appointment, the various sections of the State and assist the Councilors in building up the county societies and in making their work more practical and useful.

Section 2. The President-Elect shall be chairman of the Committee on Scientific Work, and shall appoint one active member of the Association to serve on this Committee. He shall become President of the Association at the next annual meeting of the Scientific Session following his election as President-Elect. He shall as-

sist the President in visitation of county and other meetings and shall be ex-officio a member of the House of Delegates with the right to vote. In event of death, resignation, or if he becomes permanently disqualified, his successor shall be elected by the House of Delegates and shall be installed as President of the Association at the next annual meeting of the Scientific Session of the Association.

Section 3. The Vice-Presidents shall assist the President in the discharge of his duties. In the event of his death, resignation or removal, the Council shall elect one of the Vice- Presidents to succeed him.

Section 4. The Treasurer shall give bond for the trust imposed in him whenever the House of Delegates shall deem it requisite. He shall demand and receive all funds due the association, together with the bequests and donations. He shall, under the direction of the House of Delegates, sell or lease any real estate belonging to the Association and execute the necessary papers and shall in general subject to such direction have the care and management of the fiscal affairs of the Association. He shall pay money out of the Treasury only on written order of the President, countersigned by the Secretary; he shall subject his accounts to such examination as the House of Delegates may order, and he shall annually render an account of his doings and of the state of funds in his hands.

Section 5. The Secretary, acting with the Committee on Scientific Work, shall prepare and issue the program for and attend all meetings of the Association and of the House of Delegates and he shall keep minutes of their respective proceedings in separate record books. He shall charge upon his books the assessments against each component county society at the end of the fiscal year; he shall collect and make proper credits for the same and perform such other duties as may be assigned him. He shall be custodian of all record books and papers belonging to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the association which may come into his hands. He shall provide for the registration of the members and delegates at the Annual Session. He shall keep a card index register of all practitioners of the State by counties, noting on each his status in relation to his county society and upon request shall transmit a copy of this list to the American Medical Association for publication. In so far as it is in his power he shall use the printed matter, correspondence and influence of his office to aid the Councilors in the organization and improvement of the county societies and in the extension of the power and usefulness of this Association. He shall conduct the official correspondence, notify members of meetings, officers of their election, and committees of their appointments and duties. He shall act as secretary of the Committee on Scientific Work. He shall be editor of the KENTUCKY MEDICAL JOURNAL. He shall employ such assistants as may be ordered by the Council or the House of Delegates. He shall annually make a report of his doings to the House of Delegates.

In order that the Secretary may be enabled to give that amount of his time to his duties which will permit of his becoming proficient it is desirable that he shall receive some compensation. The amount of his salary shall be fixed by the House of Delegates.

CHAPTER VII. THE COUNCIL

Section 1. The Council shall be the executive body of the House of Delegates and between sessions shall exercise the powers conferred on the House of Delegates by the Constitution and By-Laws.

Section 2. The Council shall hold daily meetings during the annual session of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of three councilors. It shall meet on the last day of the Annual Session of the Association for reorganization and for the outlining of the work for the ensuing year. At this meeting it shall elect a chairman and secretary and it shall keep a permanent record of its proceedings. It shall, through its Chairman, make an annual report to the House of Delegates at such time as may be provided, which report shall include an audit of the account of the Secretary and Treasurer and other agents of this Association and shall also specify the character and cost of all the publications of the Association during the year, and the amounts of all other property belonging to the Association, or under its control, with such suggestions as it may deem necessary. In the event of a vacancy in any office the Council may fill the same until the annual election.

Section 3. Each Councilor shall be organizer, peacemaker and censor for his district. He shall visit each county in his district at least once a year for the purpose of organizing component societies where

none exist, for inquiring into the condition of the profession and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his doings, and of the condition of the profession of each county in his district to each Annual Session of the House of Delegates. The necessary traveling expenses incurred by Councilor in the line of his duties herein imposed may be allowed by the House of Delegates upon a proper itemized statement, but this shall not be construed to include his expense in attending the Annual Session of the Association.

Section 4. Collectively the Council shall be the Board of Censors of the Association. It shall consider all questions involving the right and standing of members, whether in relation to other members, to the component societies or to this Association. All questions on an ethical nature brought before the House of Delegates of the General Meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members or a county society upon which appeal is taken from the decision of an individual Councilor. Its decision in all such cases shall be final.

Section 5. The Council shall have the right to communicate the views of the profession and of the Association in regard to health, sanitation and other important matters to the public and the lay press. Such communications shall be officially signed by the chairman and secretary of the Council as such.

Section 6. The Council shall provide for and superintend the publication and distribution of all proceedings, transactions and memoirs of the Association and shall have authority to appoint such assistants to the editors as it deems necessary. It shall manage and conduct the KENTUCKY MEDICAL JOURNAL, which is the organ of the Association, and all money received by the JOURNAL, the Council or any officer of the Association, shall be paid to the Treasurer of the Association on the third of each month.

Section 7. All reports on scientific subjects and all scientific discussions and papers read before the Association shall be referred to the KENTUCKY MEDICAL JOURNAL, for publication. The editor, with the consent of the Councilor for the District in which he presides, may curtail or abstract papers or discussions, and the Council may return any paper to its author which it may not consider suitable for publication.

Section 8. All commercial exhibits during the Annual Session shall be within the control and direction of the Council.

CHAPTER VIII. COMMITTEES

Section 1. The standing committees shall be as follows:

A Committee on Scientific Work.
A Committee on Public Relations.
A Committee on Medical Education.
A Medico-Legal Committee.

A Committee on Arrangements, and such other committees as may be necessary. Such committees shall be elected by the House of Delegates, unless otherwise provided.

Section 2. The Committee on Scientific Work shall consist of three members of which the President-elect shall be a member and Chairman and the Secretary shall be a member and Secretary and shall determine the character and scope of the scientific proceedings of the Association, subject to the provisions or the instructions of the House of Delegates or of the Association or to the provisions of the Constitution and By-Laws. Thirty days previous to each annual session it shall prepare and issue a program announcing the order in which papers, discussions and other business shall be presented which shall be adhered to by the Association as nearly as practicable.

Section 3. The Committee on Public Relations shall consist of three members and the President and Secretary. Under the direction of the House of Delegates it shall represent the Association in securing and enforcing legislation in the interest of the public health and scientific medicine. It shall keep in touch with the profession and public opinions, shall endeavor to shape legislation so as to secure the best results for the whole people and shall utilize every organized influence in local, state and national affairs and elections. Its work shall be done with dignity becoming a great profession and with that wisdom which will make effective its work and influence. It shall have authority to be heard before the entire Association upon questions of great concern at such times as may be arranged during the annual session.

Section 4. The Committee on Arrangements shall consist of the component society in the territory in which the annual session is to be held. It shall by committees of its own selection, provide suitable ac-

commodations for the meeting places of the Association and of the House of Delegates, and of their respective committees and shall have general charge of all arrangements. Its Chairman shall report an outline of the arrangements to the Secretary for publication in the program and shall make additional announcements during the session as occasion may require.

Section 5. The Medico-Legal Committee shall consist of three members, one of whom, the Chairman, shall be elected by the Council for five years, and the Secretary and Treasurer shall be the other two members *ex-officio*. This committee shall select and fix the compensation for an attorney, who shall act as General Counsel, and if required, additional local counsel. The Association through this Committee shall defend its members who are in good standing against unjust suits for malpractice.

Section 6. The Committee in Medical Education shall consist of three members who have been appointed by the President and shall serve for one year. It shall prepare a report covering its activities during the year to be presented to the House of Delegates.

Chapter IX. Assessments and Expenditures

Section 1. The assessment of five dollars per capita on the membership of the component societies is hereby made the annual dues of this Association. The Secretary of each county society shall forward its assessment together with it roster of all officers and members, list of delegates, and list of non-official physicians of the county to the Secretary of this Association on the first day of January in each year.

Section 2. Any county society which fails to pay its assessments, or make the report required, on or before the first day of April in each year, shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

Section 3. All motions or resolutions appropriating money shall specify a definite amount or so much thereof as may be necessary for the purpose indicated and must be approved by the Council and House of Delegates.

Chapter X. Rules of Conduct

The Principles set forth in the Principles of Ethics of the American Medical Association shall govern the conduct of members in their relation to each other and to the public.

Chapter XI. Rules of Order

The deliberations of this Association shall be governed by parliamentary usage as contained in Roberts Rules of Order, unless otherwise determined by a vote of its respective bodies.

Chapter XII. County Societies

Section 1. All county societies now in affiliation with the State Association or those that may hereafter be organized in this State, which have adopted principles of organization not in conflict with this Constitution and By-Laws shall upon application to the House of Delegates, receive a charter from and become a component part of this Association.

Section 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the State in which no component society exists, and charters shall be issued thereto.

Section 3. Charters shall be issued only upon approval of the House of Delegates and shall be signed by the President and Secretary of this Association. The House of Delegates shall have authority to revoke the charter of any component county society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

Section 4. Only one component medical society shall be chartered in any county. When more than one county society exists friendly overtures and concessions shall be made with the aid of the Councilor of the District if necessary and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

Section 5. Each county society shall judge of the qualifications of its own members, but as such societies are the only portals to this Association every reputable and legally registered physician who is practicing, or who will agree to practice non-sectarian medicine shall be entitled to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to ev-

ery physician in the country to become a member.

Section 6. Any physician who may feel aggrieved by the action of the society of the county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Council, which upon a majority vote may permit him to become a member of an adjacent county society.

Section 7. In hearing appeals, the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a board and as individual councilors in district and county work, effort at conciliation and compromise shall precede all such hearings.

Section 8. When a member in good standing in a component society moves to another county in the State, his name, upon request, shall be transferred without cost to the roster of the county society into whose jurisdiction he moves.

Section 9. A physician living in or near a county line may hold membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he resides.

Section 10. Each county society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material conditions of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Section 11. Frequent meetings shall be encouraged, and the most attractive programs arranged that are possible. The younger members shall be especially encouraged to do post-graduate and original research work, and to give the society the first benefit of such labors. Official position and other preferences shall be unstintingly given to such members.

Section 12. At the time of the annual election of officers each county society shall elect a delegate or delegates to represent it in the House of Delegates of this Association in the proportion of one delegate to each twenty-five members or major fraction thereof, and the secretary of the society shall send a list of such delegates to the Secretary of this Association at least sixty days before the Annual Session.

Section 13. The Secretary of each county society shall keep a roster of its members and a list of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. He shall furnish an official report containing such information, upon blanks supplied him for the purpose, to the Secretary of this Association, on the first day of January of each year, or as soon thereafter as possible, and at the same time that the dues accruing from the annual assessment are sent in. In keeping such roster the Secretray shall note any change in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

Section 14. The Secretary of each county society shall report to the Kentucky Medical Journal full minutes of each meeting and forward to it all scientific papers and discussions which the society shall consider worthy of publication.

Chapter XIII. Amendments

These By-Laws may be amended by any Annual Session by a two-thirds vote of all the delegates present at that session, after the amendment has been laid on the table for one day.

CONSTITUTION AND BY-LAWS FOR COUNTY SOCIETIES

Prepared by the Committee on Organization of the American Medical Association of Which the Late Dr. J. N. McCormack Was Chairman

Article I. Name and Title of the Society

The name and title of this organization shall be the ———————— County Medical Society.

Article II. Purpose of the Society

The purpose of this society shall be to bring into one organization the physicians of ———————— County, so that by frequent meetings and full and frank interchange of views they may secure such intelligent unity and harmony in every phase of their labor as will elevate and make effective the opinions of the profession in all scientific, legislative, public health, material and social affairs, to the end that the profession may receive that respect

and support within its own ranks and from the community to which its honorable history and great achievments entitle it; and with other county societies to form the ———————— State Medical Association, and through it, with other state associations, to form and maintain the American Medical Association.

ARTICLE III. ELIGIBILITY

Every legally registered physician residing and practicing in ———————— County who is of good moral and professional standing and who does not support or practice, or claim to practice, any exclusive system of medicine shall be eligible for membership.

ARTICLE IV. MEETINGS

Regular meetings shall be held at such time and place as may be determined by the Society.

Special meetings may be called by the President and shall be called on a written request of five members. A call for a special meeting shall state the object of such meeting, at which no business except that stated in the call shall be transacted.

ARTICLE V. OFFICERS

The officers of this Society shall consist of a President, Vice-President, Secretary, Treasurer, Delegates and Board of three Censors. These officers, except the Delegates and Board of Censors, shall be elected annually. Delegates shall be elected for two years, and in accordance with the constitution and by-laws of the state association, one member of the Board of Censors shall be elected each year to serve for three years, provided that at the first election after the adoption of this constitution one member of the Board shall be elected for one year, one for two, and one for three years.

ARTICLE VI. FUNDS AND EXPENSES

Funds for meeting the expenses of the Society shall be raised by annual dues, special assessments and voluntary contributions. Funds may be appropriated by vote of the Society for such purposes as will promote its welfare and that of the profession.

ARTICLE VII. CHARTER

The Society shall apply to the council of the state association for a charter at the meeting at which this constitution and by-laws are adopted, or as soon thereafter as practicable, and the charter shall be kept by the Secretary.

ARTICLE VIII. INCORPORATION

The Society shall have authority to appoint a Board of Trustees and to provide for articles of incorporation whenever it may deem this necessary.

ARTICLE IX. AMENDMENTS

The Society may amend any article of this constitution by a two-thirds vote of its members at any regular meeting, provided that such amendment or amendments are not in conflict with the laws and regulations of the state association; provided, also that such amendments shall have been read in open sessions at a previous regular meeting and shall have been sent by mail to each member ten days in advance of the meeting at which final action is to be taken.

BY- LAWS

CHAPTER I. MEMBERSHIP

Section 1. The Society shall judge of the qualification of its members, but as it is the only door to the State Medical Association and to the American Medical Association for physicians within its jurisdiction, every reputed and legally qualified physician of ———————— County who does not support or practice or claim to practice, sectarian medicine shall be eligible to membership.

Section 2. A candidate for membership shall make application in writing and shall state his age, his college and date of graduation, the place in which he has practiced, and the date of registration in this state. The application must be accompanied by the admission fee and must be endorsed by two members of this Society. It shall be referred to the Board of Censors, who shall inquire into the standing of the applicant, assure themselves that he or she is duly registered according to the laws of the state, and report at the next regular meeting of this Society. Election shall be by ballot, and two thirds of the votes of the members present and voting shall be necessary to elect. The application shall be returned to the Secretary, who shall file it for future reference. Applications for membership from rejected candidates shall not be received within six months of such rejection.

Section 3. A physician, accompanying his application with a transfer card from another component county society of this or any state within 60 days of the issuance of said card shall be admitted without fee on a majority vote of the members present, and without the application being referred to the Board of Censors. Such application may be acted on at the meeting at which it is presented on the vote of

three fourths of the members present, otherwise it shall lie over until the next regular meeting. No annual dues for the current year shall be charged against such members provided the same have been paid to the Society from which the applicant comes.

Section 4. A physician residing in an immediately adjoining county may become a member of this Society in like manner and on the same terms as a physician living in this county, by permission of the county society of the county in which the applicant lives.

Section 5. A member in good standing who is free from all indebtedness to this Society, and against whom no charges are pending wishing to withdraw, shall be granted a transfer card. This card shall state the date the member associated himself with the Society, the date of issuance of the card, and shall be signed by the President and Secretary. It shall be accompanied with a copy of the application presented at the time the member joined the Society, for information to the Society to which the member desires to attach himself.

Section 6. All members shall be equally privileged to attend all meetings and take part in the proceedings, and shall be eligible to any office or honor within the gift of the Society so long as they conform to this constitution and by-laws, including the payment of dues. A member who is under sentence of suspension or expulsion shall not be permitted to take part in any of the proceedings or be eligible to any office until relieved of such disability. And, provided further, that none of the privileges of membership shall be extended to any person not a member of this Society except on a majority vote of the Society in regular meeting.

Section 7. A member who is guilty of a criminal offense or gross misconduct either as a physician or as a citizen, or who violates any of the provisions of this constitution and by-laws, shall be liable to censure, suspension or expulsion. Charges against a member must be made in writing and be delivered to the Secretary, who shall immediately furnish a copy to the accused and to the Chairman of the Board of Censors. The Board of Censors shall investigate the charges on their merits, but no action shall be taken by the Board within ten days of the presentation of the charges to the accused, nor before giving the accused and accusers ample opportunity to be heard. The board shall report (1) that the charges are not sustained; or (2) that the charges are sustained and that the accused be (a) censured, (b) suspended for a definite time, (c) expelled. Censure or suspension shall require a two-thirds vote of the members present and voting and a three-fourths vote of those present and voting shall be required to expell a member. No action shall be taken by the Secretary in such cases until at least six weeks have elapsed since filing of the charge. A member suspended for a definite time shall be reinstated at the expiration of the time.

Section 8. Kindly efforts in the interest of peace, conciliation or reformation, so far as possible and expedient, shall precede the filing of formal charges affecting the character or standing of a member, and the accused shall have opportunity to be heard in his own defense in all trials and proceedings of this nature.

Section 9. Members expelled from this Society for any cause shall be eligible for membership after one year from date of expulsion and on the same terms and in like manner as original applicants.

Chapter II. Powers and Duties

Section 1. This Society shall have general direction of the affairs of the medical profession of the county, and its influence shall be constantly exerted to better the scientific, material and social condition of every physician within its jurisdiction. Systematic efforts shall be made by each member, and by the Society as a whole, to increase the membership until it embraces every reputable physician in the county.

Section 2. A meeting shall be held at—— p. m. on the ———— in each month (or oftener). ——— members shall constitute a quorum.

The officers and committee on program shall profit by experiences and by example of other similar societies, and strive to arrange for the most attractive and successful proceedings for each meeting. Crisp papers and discussions and reports of cases shall be arranged for and encouraged, and tedious and profitless proceedings and discussions shall be avoided as far as practicable.

Section 3. Agreements and schedules for fees shall not be made by this Society, but at least one meeting during each year shall be set apart for discussion of the business affairs of the profession of the county, with the view of adopting the best methods for the guidance of all. In all

proper ways the public shall be taught that business methods and prompt collections are essential to the equipment of the modern physician and surgeon and that it suffers even more than the profession when this is not recognized.

Section 4. This Society shall endeavor to educate its members to the belief that the physician should be a leader in his community, in character, in learning, in dignified and mannerly bearing, and in courteous and open treatment of his brother physicians, to the end that the profession may occupy that place in its own and the public estimation to which it is entitled.

Chapter III. Officers

Section 1. The officers of the Society shall be elected at the December meeting in each year which shall be known as the annual meeting. Nominations shall be made by informal ballot, and all elections be by ballot. The vote of the majority of all the members present shall be necessary to an election.

Section 2. The President shall preside at the meetings of the Society, and perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession in the county during the year, and it shall be his pride and ambition to leave it in better condition as regards both scientific attainments and harmony than at the beginning of his term of office.

Section 3. The Vice-President shall assist the President in the performance of his duties, shall preside in the absence and on his death, resignation or removal from the county, shall succeed to the presidency.

Section 4. The Secretary shall record the minutes of the meetings and receive and care for all records and papers belonging to the Society, including its charter. He shall notify each member of the Society as to the time and place of each meeting, and, whenever possible, give the program for the meeting. He shall keep account of and promptly turn over to the Treasurer all funds of the Society which may come into his hands. He shall make and keep a list of the members of the Society in good standing, noting of each his correct name, address, place and date of graduation, and the date of the certificate entitling him to practice medicine in this State; and in a separate list he shall note the same facts in regard to each legally qualified physician in this county not a member of this Society. It shall be his duty to send a copy of such lists on blank forms furnished him for the purpose, to the Secretary of the state association at such time as may be designated by the state association. In making such lists he shall endeavor to account for each physician who has moved into or out of the county during the year, stating when possible, both his present and past address. At the same time, and with his report of such lists of members and physicians, he shall transmit to the state association his order on the Treasurer for the annual dues of the Society.

Section 5. The Treasurer shall receive all dues and money belonging to the Society from the hands of the Secretary or members and shall pay out the same only on the written orders of the President countersigned by the Secretary.

Section 6. The Delegates shall attend and faithfully represent the members of this Society and the profession of this county in the House of Delegates of the state association, and shall make a report of the proceedings of that body to this Society at the earliest opportunity.

Chapter IV. Committees

Section 1. There shall be a Board of Censors as provided in the constitution, a Standing Committee on Program and Scientific Work, a Committee on Public Health and Legislation, and such special committees as may from time to time be deemed necessary.

Section 2. Board of Censors. This Board shall examine and report on the qualification of applicants for membership subjecting each applicant to such examination as it may deem necessary. It shall investigate charges preferred against a member, and report its conclusions and recommendations to the Society. In case of the absence of a member of the Board the President may appoint such member to fill the vacancy. The senior member of the Board in point of service shall be Chairman of the Board.

Section 3. Committee on Program and Scientific Work. This Committee shall consist of the President, Vice-President and Secretary. It shall be the duty to promote the scientific and social functions of the Society by arranging attractive programs for each meeting by urging each member to take part in the scientific work. It shall stimulate fraternalism and good feeling among the members in every way possible. (Provisions should be made in this Section for the annual luncheons, dinners, etc., which the Committee believes to be an excellent way

to bring members together. Such occasions should be made as inexpensive as possible.

Section 4. Committee on Public Health and Legislation. This committee shall consist of three members who shall be appointed annually by the President. It shall be its duty to enforce and support the sanitary and medical laws of the state in this county, to co-operate with the Committee on Public Policy and Legislation of the state association in all matters pertaining to legislation and to prosecute quacks and medical pretenders in this county.

Chapter V. Funds and Expenses

Section 1. The admission fee, which must accompany the application, shall be $———and shall include the annual dues for the fiscal year. The admission fee shall be returned if the applicant is not accepted.

Section 2. The annual dues shall be $——— and shall be payable on January 1 of each year. Any member who shall fail to pay his annual dues by April 1 shall be held as suspended without action on the part of the Society. A member suspended for non-payment of dues shall be restored in full membership on payment of all indebtedness. Members more than one year in arrears shall be dropped from the roll of members.

Section 3. The fiscal year of this Society shall be from January to December inclusive.

Chapter VI. Order of Business

The order of business shall be as follows:

1. Call to order by the President.
2. Reading of the minutes of last meeting.
3. Clinical cases.
4. Papers and discussions.
5. Unfinished business.
6. Miscellaneous business.
7. Announcements.
8. Adjournment.

Chapter VII. Rules of Order

The deliberation of this Society shall be governed by parliamentary usage as contained in Roberts' Rules of Order, unless otherwise determined by vote.

Chapter VIII. Principles of Medical Ethics

The Principles of Medical Ethics of the American Medical Association shall govern this Society.

Chapter IX. Amendment

These by-laws may be amended at any regular meeting by a two-thirds vote provided that such amendment has been read in open session at the preceding regular meeting and a copy of the same has been sent to each member by the Secretary ten days in advance of the meeting at which final action is to be taken.

REPORT OF TREASURER, A. W. DAVIS*

STATEMENT OF ASSETS

September 1, 1943

Cash:		
Treasurer's Checking Account at the Kentucky Bank and Trust Company, Madisonville, Kentucky, (Exhibit A)	$10,459.40	
Cash on hand for Deposit (Exhibit B)	26.06	$10,485.46
Treasurer's Savings Account at The Kentucky Bank and Trust Company, Madisonville, (Exhibit C)		9,489.50
Student Loan Fund Account at The Kentucky Bank and Trust Company, Madisonville, (Exhibit D)		289.26
Total Cash		$20.264.22
Bonds and Stocks in Possession of Treasurer (Exhibit E)		962.95
Office Furniture, Etc. (Exhibit F)		650.61
Miscellaneous Accounts Receivable (Exhibit G)		441.78
Total Assets		$22,319.56
Less Advance Deposits on Advertising (Exhibit G)		942.59
Total Net Assets		$21,376.97

EXHIBIT A

Reconciliation of Treasurer's Accounts
Kentucky State Medical Association
for the period from September 1, 1942 to September 1, 1943

CHECKING ACCOUNT
THE KENTUCKY BANK AND TRUST COMPANY
MADISONVILLE

Balance agreeing with Secretary's last report (September 1, 1942)		$ 7,748.33
Receipts from operation of Association and Journal		17,043.18
Total		$24,791.51
Receipts—Book Fund		21.64
Total amount to be accounted for.		$24,813.15
Disbursements for Kentucky State Medical Association and Journal.		14,353.75
Balance in Treasurer's Checking Account (September 1, 1943)		$10,459.40
Reconciliation of above balance with statement received from The Kentucky Bank and Trust Company, Madisonville:		
Treasurer's Checking Account		$12,232.19
Less Vouchers outstanding, viz:		
115—July 31, 1943— State Department of Health	$185.00	
116—July 31, 1943— Mayme Sullivan	1.00	
117—July 31, 1943— Louisville Postmaster	11.34	
118—July 31, 1943— State Department of Health	2.30	
120—July 31, 1943— Curtis & Curtis, Attorneys	100.00	
120-A—July 31, 1943— Curtis & Curtis, Attorneys	100.00	
121—July 31, 1943— The Times Journal Pub. Co	432.00	
122—August 31, 1943— A. T. McCormack, Estate	106.65	
123—August 31, 1943— Elizaheth Conkling	49.50	
124—August 31, 1943— State Department of Health	185.00	
125—August 31, 1943— The Times Journal Pub. Co	600.00	1,772.79
Balance agreeing with Treasurer's Balance		$10,459.40

Vouchers Nos. 122 through 125 are in the hands of the Secretary to be delivered when due.

*Books of the Association were audited by Heimerdinger and Dennis, Certified Public Accountants.

EXHIBIT B

CASH ON HAND FOR DEPOSIT AUG. 1, 1943

Advertisers	$ 26.06

EXHIBIT C

Savings Account
The Kentucky Bank and Trust Company
Madisonville

RECEIPTS:		
Balance agreeing with Secretary's last report, September 1, 1942		$9,445.10
Partial Payment on Louisville Title Mortgage Co. (Early) Participation Certificate No. L-7594	$16.05	
Dividends: On Louisville Title Mortgage Company Certificates Nos. 3069 and 1701	28.35	
Total		44.40
GRAND TOTAL		$9,489.50

EXHIBIT D

Student Loan Fund Savings Account

Balance in Student Loan Fund Savings Account (per Secretary's last report, September 1, 1942) agreeing with statement August 1, 1943 received from The Kentucky Bank and Trust Company, Madisonville	$289.26

EXHIBIT E

Bonds and Stocks
September 1, 1943

Bonds:			
$1,000.00 United States Savings Bond No. M 1395981-D Purchased March 16, 1940.			$800.00
Louisville Title Mortgage Company Participation Certificate No. L 7594 Bond No. 3 Early 36768 S. F.	$850.00		
Less Partial Payment previously reported	$590.25		
Partial Payment deposited Savings Account	16.05	606.30	Loss 243.70
Total Bonds			$556.30
Stocks:			
Louisville Title Mortgage Company Common Stock Certificate No. 3069 - 81 shs. and Certificate No. 1701 - 31-100 shs. (Estimated Market Value $405.00)			$406.65
Total Bonds and Stocks			$962.95

The above bonds and stocks are held by The Kentucky Bank and Trust Company of Madisonville, in safekeeping for Amplias W. Davis, M. D., Treasurer, Madisonville.

EXHIBIT F

Invoice of the Property of the Association
September 1, 1943

40 Bound Volumes Kentucky Medical Journals, 1903-1942		$400.00
1 2 Drawer O. G. Mi File		25.00
6 No. 1546 O. G. 4x6 Card Files.		26.90
1 Allen Wales Adding Machine No. 10350	$175.00	
Less 90 per cent Depreciation	157.50	17.50
1 Portable Amplifier.	$230.23	
Less 40 per cent Depreciation	92.09	138.14
250 No. 8 2-cent Envelopes, Kentucky State Medical Association, at $22.80 per M.		5.72
250 No. 9 2-cent Envelopes, Kentucky State Medical Association, at $23.16 per M.		5.79
12,000 No. 6-3-4 Non-stamped Envelopes at $1.05 per M.		12.48
12,000 No. 10 Non-stamped Envelopes, at $1.59 per M.		19.08
Total		$650.61

OLD PROPERTY

1 Filing Cabinet.
1 Globe Safe with Fixtures.
1 Cabinet for Addressograph, 36 Drawers.
1 Cabinet for Addressograph, 18 Drawers.
2,700 Medical Addressograph Plates.

(All of the property listed under "Old Property" has been fully depreciated, and very little, if anything, could be realized from the sale should disposition be made of this property.)

EXHIBIT G

Miscellaneous Accounts Receivable
September 1, 1943

Cooperative Medical Advertising Bureau	$399.04	
Less Commission	99.76	299.28
Advertising Other Than Cooperative		142.50
Total Miscellaneous Accounts Receivable		$441.78
ADVANCE DEPOSITS ON ADVERTISING		
Exhibit Space — Louisville Meeting	898.50	
Advertising Other Than Cooperative	44.09	
Total Advance Deposits on Advertising		$942.59
Louisville and Nashville Employees' Magazine—Scrip for travel	30.00	

EXHIBIT H

RECEIPTS

Checking Account:		
Dues from County Societies (Exhibits J-K-N)		$ 8,427.50
Income from Journal (Exhibit L).		8,615.68
Total Receipts of Checking Account		$17,043.18
Book Fund:		
Sale of "Medicine and Its Development in Kentucky" (Exhibit M)		21.64
Savings Account:		
Dividends and Partial Principal Payment on bond (Exhibit C)		44.40
Total Receipts—All Funds		$17,109.22
Balance on Hand September 1, 1942, Association Checking Account	$ 8,243.59	
Balance on Hand September 1, 1942, Savings Account	9,445.10	
Balance on Hand September 1, 1942, Student Loan Fund	289.26	
Balance on Hand September 1, 1942, Book Fund	-- 495.26	
Total Balances, September 1, 1942		$17,482.69
Total Receipts and Beginning Balances—All Funds		$34,591.91

DISBURSEMENTS

Total Disbursements—All Funds		$14,353.75
Balance on Hand this date, Checking Account	$ 10,933.02	
Balance on Hand this date, Savings Account	9,489.50	
Balance on Hand this date, Student Loan Fund	289.26	
Balance on Hand this date, Book Fund	-- 473.62	
Total Balances on Hand this date not including $26.06 cash on hand - All Funds		$20,238.16
Total Disbursements and Ending Balances, All Funds		$34,591.91

EXHIBIT I

DISBURSEMENTS

CHECKING ACCOUNT:			
Kentucky State Medical Association:			
President's Sundries			$ 77.83
Secretary's Salary		$1,620.00	
Less Social Security Tax Deductions	$16.20		
Less Victory Tax Deductions	40.50		
Less Withholding Tax Deductions	54.00	110.70	1,509.30
Secretary's Sundries			142.74
State Department of Health Services Rendered Kentucky State Medical Association			2,220.00

Secretary's Victory Tax Deductions			
Social Security Taxes		40.50	
Treasurer's Bond		44.40	
Officers, Councilors and Committee Expense		12.50	
Attorney's Fees, Medico-Legal Committee		381.66	
Stenographer, Medico-Legal Committee		350.00	
Less Social Security Tax Deductions	$600.00 6.00		
		594.00	
Extension Course Expense			
Procurement and Assignment Service Expense		4.00	
Postage		69.00	
Telephone Calls and Telegrams		260.81	
Association Sundries		12.65	
Association Equipment		242.98	
Portrait of Dr. A. T. McCormack		51.90	
1942 Louisville Meeting Expense		517.50	
1943 Louisville Meeting Expense		986.70	
McDowell Memorial Expense		14.50	
Total Kentucky State Medical Association		113.55	
Kentucky Medical Journal:			$7,646.52
Commission paid on Journal Advertisement Collections to Woman's Auxiliary			
Less cost of 1,000 envelopes	$21.44 5.63		
		15.81	
Journal Printing			
Journal Postage		6,062.00	
Journal Express and Freight		150.00	
Journal Sundries		23.90	
		455.52	
Total Kentucky Medical Journal			$6,707.23
Total Checking Account Disbursements			$14,353.75

EXHIBIT J

Detailed list of receipts from County Societies from September 1942 to September 1943, compared with income of same period last year:

	1942	1943
Adair	$ 35.00	30.00
Allen	25.00	20.00
Anderson	30.00	30.00
Ballard	25.00	15.00
Barren	75.00	90.00
Bath	30.00	25.00
Bell	125.00	80.00
Boone	25.00	40.00
Bourbon	70.00	65.00
Boyd	210.00	190.00
Boyle	60.00	65.00
Bracken-Pendleton	75.00	60.00
Breathitt	15.00	15.00
Breckinridge	30.00	40.00
Bullitt	40.00	40.00
Butler	15.00	15.00
Caldwell	40.00	35.00
Calloway	80.00	65.00
Campbell-Kenton	590.00	445.00
Carlisle	25.00	25.00
Carroll	30.00	30.00
Carter	40.00	35.00
Casey	20.00	20.00
Christian	155.00	175.00
Clark	80.00	60.00
Clay	35.00	35.00
Clinton	15.00	25.00
Crittenden	30.00	30.00
Cumberland	35.00	25.00
Daviess	175.00	140.00
Elliott	5.00	
Estill	35.00	25.00
Fayette	595.00	600.00
Fleming	50.00	40.00
Floyd	90.00	80.00
Franklin	100.00	100.00
Fulton	75.00	45.00
Gallatin	15.00	10.00
Garrard	20.00	20.00
Grant	50.00	35.00
Graves	90.00	90.00
Grayson	25.00	20.00
Green	25.00	20.00
Greenup	40.00	40.00
Hancock	5.00	5.00
Hardin	80.00	70.00
Harlan	225.00	275.00
Harrison	65.00	55.00
Hart	30.00	25.00
Henderson	80.00	60.00
Henry	55.00	75.00
Hickman	15.00	15.00
Hopkins	130.00	110.00
Jackson	5.00	5.00
Jefferson	2,337.50	2,092.50
Jessamine	45.00	45.00
Johnson	60.00	60.00
Knott	5.00	
Knox	45.00	45.00
Larue	15.00	15.00
Laurel	40.00	35.00
Lawrence	40.00	30.00
Lee	15.00	15.00
Leslie		
Letcher	130.00	100.00
Lewis	20.00	20.00
Lincoln	40.00	30.00
Livingston	25.00	25.00
Logan	70.00	75.00
Lyon	20.00	20.00
McCracken	190.00	195.00
McCreary	30.00	20.00
McLean	35.00	20.00
Madison	155.00	160.00
Magoffin	10.00	10.00
Marion	50.00	50.00
Marshall	65.00	60.00
Martin	10.00	5.00
Mason	80.00	45.00
Meade		
Menifee	40.00	15.00
Mercer	55.00	50.00
Metcalfe	25.00	25.00
Monroe	15.00	20.00
Montgomery	35.00	25.00
Morgan	20.00	15.00
Muhlenberg	60.00	55.00
Nelson	55.00	35.00
Nicholas	35.00	30.00
Ohio	85.00	40.00
Oldham		
Owen	15.00	15.00
Owsley	15.00	15.00
Perry	180.00	165.00
Pike	135.00	95.00
Powell	15.00	15.00
Pulaski	110.00	65.00
Robertson	10.00	10.00
Rockcastle	40.00	40.00
Rowan	35.00	20.00
Russell	20.00	20.00
Scott	85.00	75.00
Shelby	90.00	100.00
Simpson	30.00	35.00
Spencer	25.00	5.00
Taylor	35.00	30.00
Todd	25.00	20.00
Trigg	35.00	20.00
Trimble	10.00	5.00
Union	55.00	40.00
Warren-Edmonson	140.00	145.00
Washington	35.00	35.00
Wayne	25.00	15.00
Webster	40.00	45.00
Whitley	110.00	105.00
Wolfe	20.00	20.00
Woodford	45.00	5.00
	$9,477.50	$8,427.50

EXHIBIT K

Collections of dues by Secretary on account of Kentucky State Medical Association, corresponding with checks, deposit slips and receipts filed.

1942		
Oct.	1—To collections to date	$ 105.00
Nov.	1—To collections to date	77.50
		25.00

1943			
Jan. 1—To collections to date	77.50	May 1—To collections to date	2,745.00
Feb. 1—To collections to date	765.00	June 1—To collections to date	845.00
Mar. 1—To collections to date	2,348.00	July 1—To collections to date	132.50
April 1—To collections to date	1,752.00	Aug. 1—To collections to date	55.00
		Total for Year	$ 8,427.50

EXHIBIT L

Collections by Editor on account of the Journal, corresponding with receipts transferred to the Treasurer as evidenced by checks, deposit slips and receipts on file.

RECEIPTS FROM ADVERTISING

	Co-operative Gross Amount	Medical Adv. Bureau Deduction	Bureau Net Receipts	Cards, Local Adv. Etc.	Profit Dist. by Med. Adv. Bureau	Total Rec. from Journ.
1942						
September	$ 643.01	$ 152.16	$ 481.85	$ 397.63		$ 879.48
October	411.67	98.80	312.87	567.82		880.69
November	315.34	75.68	239.66	366.40		606.06
December	428.34	102.80	325.54	375.44	513.36	1,214.34
1943						
January				252.67		252.67
February	692.44	165.65	526.79	284.22		811.01
March	423.04	100.46	322.58	278.12		600.70
April	487.10	116.37	370.73	229.31		600.04
May	431.54	102.50	329.04	844.46		1,173.50
June	449.04	106.70	342.34	630.14		972.48
July	435.54	108.89	326.65	298.06		624.71
Totals	$ 4,708.06	$ 1,130.01	$ 3,578.05	$ 4,524.27	$513.36	$ 8,615.68

EXHIBIT M

"Medicine And Its Development in Kentucky" Book Fund

RECEIPTS

Overdrawn Balance due Treasurer's Checking Account agreeing with Treasurer's last report, Sept. 1, 1942....$-495.26

No.	Unit Price	Discount	Amount
1	$3.50	20%— .70	$2.80
2	3.50		7.00
8	3.00	33 1-3% 8.00	6.00
1	3.50	33 1-3% 1.16	2.34
1	8.50		3.50
8	Total Sales		21.64
	Total		$-473.62

Detail of Original Publication:

Total Sold	324
Books Donated to W. P. A.	10
Medical Library, State Department of Health	1
Books on Hand	665
Original Publication	1,000

EXHIBIT N

Total Membership by Councilor Districts and by Counties for 1943 as compared to that of 1942

	1942	1943
First District—V. A. Stilley, Benton, Councilor		
Ballard	5	3
Caldwell	8	7
Calloway	16	13
Carlisle	5	5
Crittenden	6	6
Fulton	14	9
Graves	18	18
Hickman	3	3
Livingston	5	5
Lyon	4	4
Marshall	13	12
McCracken	38	38
Trigg	7	4
	142	127
Second District—E. L. Gates, Greenville, Councilor		
Daviess	35	28
Hancock	1	1
Henderson	16	12
Hopkins	24	22
McLean	7	4
Muhlenberg	12	11
Ohio	10	8
Union	11	8
Webster	8	9
	124	103
Third District—C. C. Howard, Glasgow, Councilor		
Allen	5	4
Barren	15	17
Butler	3	3
Christian	30	34
Cumberland	7	5
Logan	14	14
Metcalf	5	5
Monroe	2	3
Simpson	6	7
Todd	5	4
Warren-Edmonson	28	29
	120	125
Fourth District—J. I. Greenwell, New Haven, Councilor		
Breckinridge	6	8
Bullitt	5	7
Grayson	5	4
Hardin	16	14
Hart	6	5
Larue	3	3
Meade	0	0
Nelson	11	7
Spencer	3	1
	55	49
Fifth District—J. B. Lukins, Louisville, Councilor		
Carroll	5	5
Franklin	20	20
Gallatin	3	2
Henry	11	15
Jeffersin	455	395
1943-44 Dues paid during 1943		1
1944-45 Dues paid during 1943		1
Oldham	0	0
Owen	3	3
Shelby	17	20
Trimble	1	1
	515	461
Sixth District—W. B. Atkinson, Campbellsville, Councilor		
Adair	7	6
Anderson	6	6
Boyle	12	13
Green	5	4
Marion	10	10
Mercer	11	10

Taylor	7	6
Washington	7	7
	65	62

Seventh District—Virgil Kinnaird, Lancaster, Councilor

Casey	4	4
Clinton	3	5
Garrard	4	4
Lincoln	8	6
McCreary	6	4
Pulaski	22	13
Rockcastle	8	8
Russell	4	4
Wayne	5	3
	64	51

Eighth District—J. M. Blades, Butler, Councilor

Boone	5	6
Bracken-Pendleton	14	12
Campbell-Kenton	116	85
Fleming	10	8
Grant	10	7
Harrison	13	11
Mason	16	8
Nicholas	7	6
Robertson	2	2
	193	145

Ninth District—Proctor Sparks, Ashland, Councilor

Boyd	40	38
Carter	8	7
Elliott	0	0
Floyd	18	16
Greenup	8	8
Johnson	12	12
Lawrence	8	6
Lewis	4	4
Magoffin	2	2
Martin	1	1
Pike	26	19
	127	113

Tenth District—C. A. Vance, Lexington, Councilor

Bath	5	5
Bourbon	14	13
Breathitt	3	3
Clark	16	12
Estill	7	7
Fayette	119	118
Jessamine	9	9
Lee	3	3
Madison	30	31
Menifee	8	3
Montgomery	7	5
Morgan	3	3
Owsley	3	3
Powell	3	3
Rowan	7	4
Scott	17	15
Wolfe	4	4
Woodford	9	1
	267	240

Eleventh District—H. K. Buttermore, Liggett, Councilor

Bell	24	15
Clay	7	7
Harlan	44	54
Jackson	1	1
Knott	1	0
Knox	9	9
Laurel	8	7
Leslie	0	0
Letcher	23	20
Perry	34	32
1942-1943 dues paid during 1941.	1	0
Whitley	21	20
District Total	173	165
Grand Total	1,845	1,641

Reconciliation of Membership and Dues Collected for 1942—1943

	Number	Rate	Amount	Total Amount
Current Year Dues..	1,638	$5.00	$8,190.00	
Current Year Dues..	3	2.50	7.50	8,197.50
Total	1,641			
1944 Dues Paid	1	5.00		5.00
1945 Dues Paid	1	5.00		5.00
Delinquent Dues Collected During 1942--1943				
First District				
McCracken	1	5.00	5.00	
Second District				
None				
Third District				
Barren	1	5.00	5.00	
Christian	1	5.00	5.00	
Logan	1	5.00	5.00	
Monroe	1	5.00	5.00	
Fourth District				
Bullitt	1	5.00	5.00	
Fifth District				
Carroll	1	5.00	5.00	
Jefferson	17	5.00	85.00	
Jefferson (1-2 year)	12	2.50	30.00	
Sixth District				
None				
Seventh District				
None				
Eighth District				
Boone	2	5.00	10.00	
Campbell-Kenton	4	5.00	20.00	
Mason	1	5.00	5.00	
Ninth District				
None				
Tenth District				
Fayette	2	5.00	10.00	
Madison	1	5.00	5.00	
Eleventh District				
Bell	1	5.00	5.00	
Harlan	1	5.00	5.00	
Perry	1	5.00	5.00	
Whitley	1	5.00	5.00	
Total Delinquent Dues Collected	50			$ 220.00
Total Collections	1,693			$8,427.50

EXHIBIT O

Secretary's Monthly Balance Sheet, Agreeing with Books

1942					
Sept.	1	Balance on hand (Checking Account)	$ 8,243.59		
		Balance on hand (Book Fund)	--495.26		
		Total Balance on Hand	$ 7,748.33		
			Disbursements	Collections	Balance
Oct.	1	Association and Journal	$ 1,820.29	984.48	
		Book Fund		3.50	6,916.02
Nov.	1	Association and Journal	2,031.80	958.19	5,842.41
Dec.	1	Association and Journal	1,713.19	631.06	
		Book Fund		5.14	4,765.42
1943					
Jan.	1	Association and Journal	848.35	1,291.84	5,208.91
Feb.	1	Association and Journal	1,284.72	1,017.67	4,941.86
March	1	Association and Journal	980.47	3,159.01	
		Book Fund		13.00	7,133.40
April	1	Association and Journal	932.34	2,352.70	8,553.76
May	1	Association and Journal	937.94	3,345.04	10,960.86
June	1	Association and Journal	910.59	1,518.50	11,568.77
July	1	Association and Journal	949.31	1,104.98	11,724.44
Aug.	1	Association and Journal	1,003.60	679.71	11,400.55
Sept.	1	Association and Journal	941.15		10,459.40
		Totals	$ 14,353.75	17,064.82	
Balance on Hand, September 1, 1942.					
		Checking Account		8,243.59	
		Book Fund		--495.26	24,813.15

Balance on Hand, September 1, 1943:		
Association and Journal	10,933.02	
Book Fund	-473.62	
Net Checking Accoont Balance	$10,459.40	
Total Disbursements as above	14,353.75	24,813.15

EXHIBIT P

Detailed Statement of Disbursements of A. W. Davis, M. D., Treasurer, Kentucky State Medical Association, each made on a Voucher Check signed by E. M. Howard, M. D., President, A. T. McCormack, M. D., Secretary, or P. E. Blackerby, Assistant Secretary, and himself, from September 1, 1942 through August 31, 1943. All of the following checks from September 15 through October 31, 1942 were approved by the Council and ordered paid by House of Delegates.

1942

Sept. 15	Voucher Check No. 1			$ 50.00
	Heimerdinger & Dennis, Certified Public Accountants			
	To audit of records of the Secretary and Treasurer for the period beginning September 1, 1941 and ending September 1, 1942 and audit of records of Treasurer of the Woman's Auxiliary and the Business Manager of The Quarterly for the period from August 1, 1941 to August 1, 1942		$ 50.00	
Sept. 15	Voucher Check No. 2			19.17
	Louisville Postmaster, Louisville			
	To July postage		9.52	
	To August postage		9.65	
			19.17	
Sept. 15	Voucher Check No. 3			50.00
	Postmaster, Bowling Green			
	To Journal postage		50.00	
Sept. 15	Voucher Check No. 4			1.57
	State Department of Health			
	To reimbursement for express for Journal		1.57	
Sept. 15	Voucher Check No. 5			89.74
	Courier-Journal Job Printing Co., Louisville			
	To 2,500 inserts of photo - E. M. Howard, President		39.00	
	To express		.74	
			89.74	
Sept. 15	Voucher Check No. 6			12.00
	Schuman's, New York, N. Y.			
	To book by Chas. Clay, "Cases of Peritoneal Section, for the Extirpation of Diseased Ovaria, by the Large Incision from Sternum to Pubes, Successfully Treated." London, 1942		12.00	
Sept. 15	Voucher Check No. 7			18.36
	Bush-Krebs Co., Louisville			
	To 3 halftone portraits		11.70	
	To 1 halftone portrait	6.80		
	Less 2 per cent	.14	6.66	
			18.36	
Sept. 15	Voucher Check No. 8			3.70
	W. K. Stewart Company, Louisville			
	To 1 zipper ring book		2.00	
	To 1 frame		1.70	
			3.70	
Sept. 15	Voucher Check No. 9			2.00
	Ida B. Campbell, Louisville			
	To services rendered September 15th sorting and refiling Journals		2.00	
Sept. 15	Voucher Check No. 10			2.00
	Mrs. Frances Gentele, Louisville			
	To services rendered September 15th sorting and refiling Journals		2.00	
Sept. 30	Voucher Check No. 11			133.65
	A. T. McCormack			
	To September salary, Secretary		135.00	
	Less Social Security taxes for September		1.35	
			133.65	
Sept. 30	Voucher Check No. 12			49.50
	Elizabeth Conkling			
	To September salary, Stenographer for Medico-Legal Committee		50.00	
	Less Social Security taxes for September		.50	
			49.50	
Sept. 30	Voucher Check No. 13			11.10
	Collector of Internal Revenue, Louisville			
	To Social Security taxes from June 1 through September 30, 1942			
	1 per cent of pay roll paid, as follows:			

A. T. McCormack	4.05		
Elizabeth Conkling	1.50	5.55	
Employees share due from June 1 through September 30, 1942:			
1 per cent of pay roll paid, as follows:			
A. T. McCormack	4.05		
Elizabeth Conkling	1.50	5.55	
		11.10	
Sept. 30—Voucher Check No. 14			185.00
State Department of Health			
To services rendered for month of September		185.00	
Sept. 30—Voucher Check No. 15			500.00
The Times Journal Publishing Co.			
To account of October Journal		500.00	
Sept. 30—Voucher Check No. 16			517.50
Samuel R. McDowell, Louisville			
To painting portrait of A. T. McCormack		500.00	
To frame and glass		17.50	
		517.50	
Sept. 30—Voucher Check No. 17			112.50
I. E. Sticker, Louisville			
To services rendered		112.50	
Sept. 30—Voucher Check No. 18			112.50
M. J. Streicher, Louisville			
To services rendered		112.50	
Oct. 31—Voucher Check No. 19			133.65
A. T. McCormack			
To October salary, Secretary		135.00	
Less Social Security taxes for October		1.35	
		133.65	
Oct. 31—Voucher Check No. 20			49.50
Elizabeth Conkling			
To October salary, Stenographer for Medico-Legal Committee		50.00	
Less Social Security taxes for October		.50	
		49.50	
Oct. 31—Voucher Check No. 21			185.00
State Department of Health			
To services rendered for month of October		185.00	
Oct. 31—Voucher Check No. 22			48.00
V. A. Stilley, Benton			
To expense as Councilor of the 1st District		48.00	
Oct. 31—Voucher Check No. 23			20.50
W. B. Atkinson, Campbellsville			
To expense as Councilor of the 6th District		20.50	
Oct. 31—Voucher Check No. 24			56.21
Proctor Sparks, Ashland			
To expense as Councilor of the 9th District		56.21	
Oct. 31—Voucher Check No. 25			83.50
Chas. A. Vance, Lexington			
To expense as Councilor of the 10th District		83.50	
Oct. 31—Voucher Check No. 26			99.25
H. K. Buttermore, Liggett			
To expense as Councilor of the 11th District for 1940-41		29.50	
To expense as Councilor of the 11th District for 1941-42		69.75	
		99.25	
Oct. 31—Voucher Check No. 27			39.22
E. M. Howard, Harlan			
To expense to State Meeting		39.22	
Oct. 31—Voucher Check No. 28			35.63
Mayme Sullivan, Louisville			
To reimbursement for the following:			
Telegram to Chicago		.42	
State Meeting expenses for self, assistant and moving picture machine operator		35.21	
		35.63	
Oct. 31—Voucher Check No. 29			9.75
Elva V. Grant			
To State Meeting expense		9.75	
Oct. 31—Voucher Check No. 30			4.90
Ruth Flagg, Louisville			
To State Meeting expense		4.90	
Oct. 31—Voucher Check No. 31			1.60
Emily Stoecker, Louisville			
To State Meeting expense		1.60	
Oct. 31—Voucher Check No. 32			1.80
Blanche H. Fabyan, Louisville			
To State Meeting expense		1.80	

Oct. 31—Voucher Check No. 33				20.00
Otho Haskins, Louisville				
To Honorarium			20.00	
Oct. 31—Voucher Check No. 34				15.00
American Medical Association				
To 1 copy (17th Edition) American Medical Directory			15.00	
Oct. 31—Voucher Check No. 35				136.00
Art Embroidery Company, Louisville				
To 1 service flag			36.00	
To 400 stars at 25c			100.00	
			136.00	
Oct. 31—Voucher Check No. 36				81.75
To Brown Hotel				
To 12 dinners for Committee members			18.00	
To 15 dinners for Council members			18.75	
To reception and tea			45.00	
			81.75	
Oct. 31—Voucher Check No. 37				240.55
Jos. T. Griffin Co., Louisville				
To erecting scientific booths		184.80		
To 21 signs at $1.25		26.25		
To 2 two foot radiological boxes		8.00		
To 2 five foot radiological boxes		20.00	239.05	
To 1 14" x 22" "Tournament" sign			1.50	
			240.55	
Oct. 31—Voucher Check No. 38				12.39
Premier Paper Company, Louisville				
To 177 lbs. 6 rolls 18" 40 lb. Kraft			12.39	
Oct. 31—Voucher Check No. 39				9.72
E. H. Roederer, Louisville				
To lettering 81 ribbons, 10 presidents, 36 vice-presidents, 25 councilors, 10 treasurers			9.72	
Oct. 31—Voucher Check No. 40				11.38
State Department of Health				
To reimbursement for long distance calls for Association and Journal			11.38	
Oct. 31—Voucher Check No. 41				736.50
The Times Journal Publishing Co.				
To 1M programs for State Meeting			95.00	
To 4 pages not charged on August issue (64 pages charged instead of 68)		25.00		
To 2,500 September issue, 84 pages	658.00			
To 6 pt. tabular	75.00			
To 2 ads in red	17.50			
To inserts	5.00			
	755.50			
Less credit by check No. 165	600.00			
Balance due on September issue		155.50		
2,200 October issue, 60 pages	435.00			
To 3 ads in red	25.50			
	460.50			
Credit by check No. 15	500.00			
Overpayment on October issue		-39.50		
To 2,050 November issue, 68 pages	475.00			
To 3 ads in red	25.50	500.50	641.50	
			736.50	
Nov. 30—Voucher Check No. 42				133.65
A. T. McCormack				
To November salary, Secretary			135.00	
Less Social Security taxes for November			1.35	
			133.65	
Nov. 30—Voucher Check No. 43				49.50
Elizabeth Conkling				
To November salary, Stenographer for Medico-Legal Committee			50.00	
Less Social Security taxes for November			.50	
			49.50	
Nov. 30—Voucher Check No. 44				185.00
State Department of Health				
To services rendered for month of November			185.00	
Nov. 30—Voucher Check No. 45				40.00
D. M. Griffith, Owensboro				
To expense as Councilor of the 2nd District			40.00	
Nov. 30—Voucher Check No. 46				3.30
Bush-Krebs Co., Louisville				
To 1 HT X-ray illustration			3.37	
Less 2 per cent discount			.07	
			3.30	

Nov. 30	Voucher Check No. 47			486.42
	The Master Reporting Company, New York			
	To reporting Kentucky State Medical Association, September 28 - October 1, 1942		405.84	
	Travel expense		78.99	
	Express and postage		1.59	
			486.42	
Nov. 30	Voucher Check No. 48			2.32
	State Department of Health			
	To reimbursement for long distance calls for Journal and Association		2.32	
Nov. 30	Voucher Check No. 49			813.00
	The Times Journal Publishing Co.			
	To 4 pages not charged in November issue (68 pages charged instead of 72)		28.00	
	To 2,150 December issue, 104 pages	753.00		
	To audit and index, 6pt	15.00		
	To 2 ads in red	17.00	785.00	
			813.00	
Dec. 22	Voucher Check No. 50			144.25
	A. T. McCormack			
	To December salary, Secretary	135.00		
	Less Social Security taxes for December	1.35	133.65	
	To expense attending Conference of State Secretaries		10.60	
			144.25	
Dec. 22	Voucher Check No. 51			49.50
	Elizabeth Conkling			
	To December salary, Stenographer for Medico-Legal Committee		50.00	
	Less Social Security taxes		.50	
			49.50	
Dec. 22	Voucher Check No. 52			185.00
	State Department of Health			
	To services rendered for month of December		185.00	
Dec. 22	Voucher Check No. 53			8.50
	Meffert Equipment Co., Louisville			
	To 2 No. 1546 steel card cases		10.00	
	Less 15 per cent		1.50	
			8.50	
Dec. 22	Voucher Check No. 54			450.00
	The Times Journal Publishing Co.			
	To account of January issue		450.00	
Dec. 31	Voucher Check No. 55			11.10
	Collector of Internal Revenue, Louisville			
	To Social Security taxes from October 1 through December 31, 1942 - 1 per cent of pay roll paid, as follows:			
	A. T. McCormack	4.05		
	Elizabeth Conkling	1.50	5.55	
	To employees' share due from October 1 through December 31, 1942 - 1 per cent of pay roll paid, as follows:			
	A. T. McCormack	4.05		
	Elizabeth Conkling	1.50	5.55	
			11.10	
1943				
Jan. 30	Voucher Check No. 56			185.25
	A. T. McCormack			
	To January salary, Secretary	135.00		
	Less Social Security tax for January	1.35		
	Less Victory tax for January	6.75	8.10	126.90
	To balance of expense attending Conference of State Secretaries at Chicago		58.35	
			185.25	
Jan. 30	Voucher Check No. 57			49.50
	Elizabeth Conkling			
	To January salary, Stenographer for Medico-Legal Committee		50.00	
	Less Social Security tax for January		.50	
			49.50	
Jan. 30	Voucher Check No. 58			185.00
	State Department of Health			
	To services rendered for month of January		185.00	
Jan. 30	Voucher Check No. 59			150.00
	Curtis & Curtis, Attorneys, Louisville			
	To services rendered from July 1, 1942 through December 31, 1942		150.00	

Jan.	30—Voucher Check No. 60				50.00
	Postmaster, Bowling Green				
	To Journal postage			50.00	
Jan.	30—Voucher Check No. 61				4.92
	State Department of Health				
	To reimbursement for express for Journal			3.92	
	To reimbursement long distance calls for Journal			1.00	
				4.92	
Jan.	30—Voucher Check No. 62				56.55
	Schuman's, New York, N. Y.				
	To List "G" - Richmond and Louisville Journal vols. 5, 16, 20, 21, 24 & 25 - 6 at $3.50		21.00		
	vol. 6, no. 3; vol. 12, nos. 1, 2, 4-6; vol. 17, nos. 1-5; vol. 26, no. 1 - 12 nos. at 75c		9.00		
			30.00		
	Less 10 per cent discount		3.00	27.00	
	Postage			.66	
				27.66	
	"List "G" - Item 24. Bell	32.00			
	Less 10 per cent discount	3.20	28.80		
	Postage		.09	28.89	
				56.55	
Jan.	30—Voucher Check No. 63				69.00
	Brown Hotel, Louisville				
	To 32 dinners (Members Council and Committees)			64.00	
	To waiters			5.00	
				69.00	
Jan.	30—Voucher Check No. 64				534.50
	The Times Journal Publishing Co.				
	To 2,050 January issue, 60 pages	425.00			
	To 2 ads in red	17.00	442.00		
	Credit by Check No. 54		450.00		
			-8.00		
	To 4 pages not charged December issue (104 charged instead of 108)		28.00		
	To extra postage, cards, Journals returned		3.00		
	Balance due			23.00	
	To 2,075 February issue, 68 pages		486.00		
	To 3 ads in red		25.50	511.50	
				534.50	
eb.	27—Voucher Check No. 65				200.69
	A. T. McCormack				
	To February salary, Secretary		135.00		
	Less Social Security tax for February	1.35			
	To Victory tax for February	6.75	8.10	126.90	
	To expense of dinner meeting for Governor and his Staff pertaining to Tuberculosis problem		32.95		
	To trip to Chicago to attend A.M.A. Council meeting of Committee on Medical Education and Hospitals		40.84	73.79	
				200.69	
Feb.	27—Voucher Check No. 66				49.50
	Elizabeth Conkling				
	To February salary, Stenographer for Medico-Legal Committee			50.00	
	Less Social Security tax for February			.50	
				49.50	
Feb.	27—Voucher Check No. 67				185.00
	State Department of Health				
	To services rendered for month of February			185.00	
Feb.	27—Voucher Check No. 68				45.00
	Schuman's New York				
	To Anatomy of the Bones, Muscles and Joints, Edinburgh, 1794 - Bell, John			45.00	
Feb.	27—Voucher Check No. 69				1.39
	Universal Carloading & Distributing Co., Inc., Louisville				
	To transportation of 1 ctn. file cabinet legal wood			1.39	
Feb.	27—Voucher Check No. 70				8.39
	State Department of Health				
	To reimbursement for long distance calls for Association		6.70		
	To reimbursement for express for Journal		1.69	8.39	
Feb.	27—Voucher Check No. 71				490.50
	The Times Journal Publishing Co.				

	To 2,150 March issue, 68 pages		493.00	
	8 ads in red		25.50	
			518.50	
	Less refund on February issue (68 pages charged instead of 64)		28.00	
			490.50	
Mar.	31—Voucher Check No. 72			126.90
	A. T. McCormack			
	To March salary, Secretary		135.00	
	Less Social Security tax for March	1.35		
	Less Victory tax for March	6.75	8.10	
			126.90	
Mar.	31—Voucher Check No. 73			49.50
	Elizabeth Conkling			
	To March salary, Stenographer for Medico-Legal Committee		50.00	
	Less Social Security tax for March		.50	
Mar.	31—Voucher Check No. 74			185.00
	State Department of Health			
	To services rendered for month of March		185.00	
Mar.	31—Voucher Check No. 75			20.25
	Collector of Internal Revenue, Louisville			
	To Victory tax from January 1 through March 31, 1943 deducted from salary of A. T. McCormack, Louisville		20.25	
Mar.	31—Voucher Check No. 76			11.10
	Collector of Internal Revenue, Louisville			
	To Social Security taxes from January 1 through March 31, 1943 - 1 per cent of pay roll paid, as follows:			
	A. T. McCormack	4.05		
	Elizabeth Conkling	1.50	5.55	
	Employees' share due from January 1 through March 31, 1943 - 1 per cent of pay roll paid as follows:			
	A. T. McCormack	4.05		
	Elizabeth Conkling	1.50	5.55	
			11.10	
Mar.	31—Voucher Check No. 77			2.70
	Addressograph Sales Agency, Louisville			
	To 260 style L label loktabs		2.70	
Mar.	31—Voucher Check No. 78			3.82
	Bush-Krebs Co.			
	To 1 copper halftone of portrait of doctor, 1" x 1 1-4"		3.90	
	Less 2 per cent discount		.08	
			3.82	
Mar.	31—Voucher Check No. 79			2.95
	Koehler Stamp & Stationery Co., Louisville			
	To 1 signature stamp and cut		2.95	
Mar.	31—Voucher Check No. 80			5.40
	Meffert Equipment Co., Louisville			
	To 1 No. 2788 D 6 columar book - 300 pages		6.75	
	Less 20 per cent discount		1.35	
			5.40	
Mar.	31—Voucher Check No. 81			3.22
	State Department of Health			
	To reimbursement for express for Journal		1.77	
	To reimbursement for long distance calls for Association		1.45	
			3.22	
Mar.	31—Voucher Check No. 82			521.50
	The Times Journal Publishing Co.			
	To 2,150 April issue, 72 pages	522.00		
	To 3 ads in red	25.50		
	To reimbursement for postage on returned cards, etc.	2.00		
		549.50		
	Less rebate on 4 pages overcharged on March issue	28.00	521.50	
Apr.	30—Voucher Check No. 83			126.90
	A. T. McCormack			
	To April salary, Secretary		135.00	
	Less Social Security tax for April	1.35		
	Less Victory tax or April	6.75	8.10	
			126.90	
Apr.	30—Voucher Check No. 84			49.50
	Elizabeth Conkling			
	To April salary, Stenographer for Medico-Legal Committee		50.00	
	Less Social Security tax for April		.50	
			49.50	

Apr.	30—Voucher Check No. 85			185.00
	State Department of Health			
	To services rendered for month of April		185.00	
Apr.	30—Voucher Check No. 86			43.40
	Office Equipment Co., Louisville			
	To 1 2 drawer File		25.00	
	To 4 No. 1546 Olive Green Card Files		18.40	
			43.40	
Apr.	30—Voucher Check No. 87			10.00
	Mrs. J. M. Richardson, Florist, Glasgow			
	To 1 design, C. C. Turner		10.00	
Apr.	30—Voucher Check No. 88			3.50
	To Standard Printing Co., Louisville			
	To binding 1 volume "Kentucky Medical Journal" 1942		3.50	
Apr.	30—Voucher Check No. 89			3.00
	Electric Blue Print and Supply Co., Louisville			
	To 50 blue prints of floor plan for State Meeting		3.00	
Apr.	30—Voucher Check No. 90			3.64
	State Department of Health			
	To reimbursement for express for Journal		1.94	
	To reimbursement for long distance calls for Journal		1.70	
			3.64	
Apr.	30—Voucher Check No. 91			12.50
	American Surety Company of New York, Louisville			
	To premium on policy for Amplias W. Davis, M. D., Treasurer		12.50	
Apr.	30—Voucher Check No. 92			500.50
	The Times Journal Publishing Co.			
	To 1975 May Issue, 68 pages		475.00	
	To 3 ads in red		25.50	
			500.50	
May	31—Voucher Check No. 93			126.90
	A. T. McCormack			
	To May salary, Secretary		135.00	
	Less Social Security tax for May	1.35		
	Less Victory tax for May	6.75	8.10	
			126.90	
May	31—Voucher Check No. 94			49.50
	Elizabeth Conkling			
	To May salary, Stenographer for Medico-Legal Committee		50.00	
	Less Social Security tax for May		.50	
			49.50	
May	31—Voucher Check No. 95			185.00
	State Department of Health			
	To services rendered for month of May		185.00	
May	31—Voucher Check No. 96			38.61
	E. M. Howard, Harlan			
	To expense as President attending Special Council Meeting, Mar 13, 1943		38.61	
May	31—Voucher Check No. 97			4.00
	Milton J. Wilder, Louisville			
	To expenses incurred attending and presenting paper at Extension Course held in Corbin		4.00	
May	31—Voucher Check No. 98			34.20
	The Pendennis Club, Louisville			
	To Council dinner		34.20	
May	31—Voucher Check No. 99			1.75
	Koehler Stamp & Stationery Co., Louisville			
	To 2 stamps		1.75	
May	31—Voucher Check No. 100			7.04
	State Department of Health			
	To reimbursement for express for Journal	.97		
		.97		
			1.94	
	To reimbursement for long distance calls, Association	3.40		
	To reimbursement for long distance calls, Journal	1.70	5.10	
			7.04	
May	31—Voucher Check No. 101			6.59
	Bush-Krebs Co., Louisville			
	To 2 zinc etchings of charts		6.59	
May	31—Voucher Check No. 102			457.00
	The Times Journal Publishing Co.			
	To 2,000 June issue, 60 pages	420.00		
	To 3 ads in red	25.50		
			445.50	

To 150 exhibit space forms	5.00		
To 150 application for space forms	6.50		
		11.50	
		457.00	
June 30—Voucher Check No. 103			126.90
A. T. McCormack			
To June salary, Secretary		135.00	
Less Social Security tax for June	1.35		
Less Victory tax for June	6.75	8.10	
		126.90	
June 30—Voucher Check No. 104			49.50
Elizabeth Conkling			
To June salary, Stenographer for Medico-Legal Committee		50.00	
Less Social Security tax for June		.50	
		49.50	
June 30—Voucher Check No. 105			185.00
State Department of Health			
To services rendered for month of June		185.00	
June 30—Voucher Check No. 106			20.25
Collector of Internal Revenue, Louisville			
To Victory tax from April 1 through June 30, 1943 deducted from salary of A. T. McCormack, Louisville		20.25	
June 30—Voucher Check No. 107			11.10
Collector of Internal Revenue, Louisville			
To Social Security taxes from April 1 through June 30, 1943 - 1 per cent of pay roll paid, as follows:			
A. T. McCormack	4.05		
Elizabeth Conkling	1.50	5.55	
To employees' share due from April 1 through June 30, 1943 - 1 per cent of pay roll paid, as follows:			
A. T. McCormack	4.05		
Elizabeth Conkling	1.50	5.55	
		11.10	
June 30—Voucher Check No. 108			50.00
Bowling Green Postmaster, Bowling Green			
To postage for Journal		50.00	
June 30—Voucher Check No. 109			5.30
Louisville Postmaster, Louisville			
To May postage		5.30	
June 30—Voucher Check No. 110.....Void			
June 30—Voucher Check No. 111			2.26
State Department of Health			
To reimbursement for express for Journal		2.26	
June 30—Voucher Check No. 112			499.00
The Times Journal Publishing Co.			
To 2100 July issue, 67 pages		480.00	
To 2 ads in red		17.50	
		497.50	
Return postage		1.50	
		499.00	
July 31—Voucher Check No. 113			106.65
A. T. McCormack			
To July salary, Secretary		135.00	
Less Social Security tax for July	1.35		
Less Withholding tax for July	27.00	28.35	
		106.65	
July 31—Voucher Check No. 114			49.50
Elizabeth Conkling			
To July salary, Stenographer for Medico-Legal Committee		50.00	
Less Social Security tax for July		.50	
		49.50	
July 31—Voucher Check No. 115			185.00
State Department of Health			
For services rendered for month of July		185.00	
July 31—Voucher Check No. 116			1.00
Mayme Sullivan, Louisville			
To reimbursement for annual verification corporation fee		1.00	
July 31—Voucher Check No. 117			11.34
Louisville Postmaster, Louisville			
To June postage		11.34	
July 31—Voucher Check No. 118			2.30
State Department of Health			
To reimbursement for express for the Journal		2.30	

July 31—Voucher Check No. 119			15.81
Woman's Auxiliary, Louisville			
To 25 per cent commission on advertisement amounting to 85.75		21.44	
Less cost of 1M Journal envelopes delivered		5.63	
		15.81	
July 31—Voucher Check No. 120			100.00
Curtis & Curtis, Attorneys, Louisville			
To services rendered		100.00	
July 31—Voucher Check No. 120-A			100.00
Curtis & Curtis, Attorneys, Louisville			
To payment in full of services rendered		50.00	
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July 31—Voucher Check No. 121			432.00
The Times Journal Publishing Co.			
To 2,000 August Issue, 59 pages		415.00	
To 2 ads in red		17.00	
Aug 31—Voucher Check No. 122			106.65
A. T. McCormack			
To August salary, Secretary		135.00	
Less Social Security tax for August	1.35		
Less Withholding tax for August	27.00	28.35	
		106.65	
Aug. 31—Voucher Check No. 123			49.50
Elizabeth Conkling, Louisville			
To August salary, Stenographer for Medico-Legal Committee		50.00	
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		49.50	
Aug. 31—Voucher Check No. 124			185.00
State Department of Health			
To services rendered for month of August		185.00	
Aug. 31—Voucher Check No. 125			600.00
The Times Journal Publishing Company			
To account of September Journal		600.00	
Total			$14,253.75

BOOK REVIEWS

WE CARRY ON. TALES OF THE WAR: By Russian writers of note and fame. Published by the Foreign Languages Publishing House, Moscow. Translated from Russian by D. L. Fromberg.

These are a collection of stories based on actual occurences of the Russian peoples struggle against the tyranny of the Nazi, and when read will give sober thought to our own people of what trials and misery can be meted out by such heartless conquerors.

NEW AND NONOFFICIAL REMEDIES, 1943, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on Jan. 1, 1943. Cloth. Price, postpaid, $1.50. Pp. 772. Chicago: American Medical Association, 1943.

The current volume of New and Nonofficial Remedies continues, with minor improvements, the convenient and informative system of classification adopted for the 1942 volume. The terminology of the official drugs has been revised to conform to the U.S.P. XII and the N.F. VII.

The chapter, Digitalis and Digitalis-like Principles and Preparations, has been extensively and somewhat radically revised to keep pace with the changing attitude toward this drug. In this revision the Council had the aid of the foremost digitalis authorities, pharmacologists and clinicians alike.

No one can examine the successive volumes of New and Nonofficial Remedies without increasing his profound respect for the faithful and unselfish work of the Council on Pharmacy and Chemistry in the cause of rational therapeutics. Each volume represents a progressive milestone on the road of medical science.

UROLOGY IN GENERAL PRACTICE: By Nelse Ockerbald, B. S., M. D., F.A.C.S., Professor of Clinical Urology, University of Kansas School of Medicine, Senior Attending Urologist to St. Luke's Hospital, Consulting Urologist to the Children's Mercy Hospital, Kansas City, Mo., Diplomate of the American Board of Urology and Hjalmar E. Carlson, B. S., A. M.M.D., F.A.C.S Instructor in Urology, University of Kansas School of Medicine, Attending Urologist to St. Luke's Hospital, Kansas City, Mo., Diplomate of the American Board of Urology. The Year Book Publishers Inc., 304 S. Dearborn St., Chicago. Price $4.00.

This book is the product of many years of endeavor to teach the specialty of urology to medical students and to interpret it to the profession in general.

Many new procedures that have been added to this science in the last few years are included in this volume.

Kentucky Medical Journal

Published Monthly By
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Incorporated

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ANNUAL MEETING LOUISVILLE
OCTOBER 4-6, 1943

COUNTY SOCIETY REPORTS

Letcher: The regular meeting of the Letcher County Medical Society for the Month of May, which should have been on the last Tuesday in the month, was deferred one week and was held in the Directors' Room of the Bank of Whitesburg at 7:30 P. M., on Tuesday, June 1st, 1943.

The following members were present: Dr. M. W. Anderson, Dr. T. M. Perry, Dr. W. L. Womack, Dr. Richard F. Brady, Dr. J. W. Turner, Dr. E. K. Munn, Dr. R. Dew Collins and B. C. Bach.

Dr. E. K. Munn of the Jenkins Hospital, had the program, and, as at last meeting, continued with resume of the Seventh Annual Meeting of the New Orleans Graduate Medical Assembly, which he attended on March 15th, 16th, 17th, and 18th of this year. The report on this Assembly by Dr. Munn, at this and the April Meeting of the Society, was a treat, to say the least. It was an unusually interesting report and represented a tremendous amount of work to compile this data for presentation, as it was done. The report was discussed at length, by all members fortunate enough to be present and hear it.

It was then voted that the June meeting be dispensed with and the meeting was adjourned until the last Tuesday in July.

B. C. Bach, Secretary.

Rockcastle: The Rockcastle County Medical Society held its regular monthly meeting at Dr. Griffith's office Friday night July 9th. Dr. Griffith read a very interesting paper on duty of general practitioner in the treatment of the eye.

R. G. Webb presented to the Society a young man suffering from heart disease, his condition being discovered when he was examined two weeks ago for the army. This case proved to be very interesting to all, and it was decided that we would make it a rule to hold a clinic on our worst cases each month. The society will meet next month at the office and home of Dr. Lewis, Wildie.

The following delegates were elected to attend the State Medical Meeting in Louisville: Drs. Griffith, Owens and Webb.

R. G. Webb, Secretary.

Rockcastle: The regular meeting of the Rockcastle County Medical Society was held at the home of R. H. Lewis, Wildie, August 6, 1943 with all our members and their wives present, except Dr. Lee Chesnut. Dr. and Mrs. Lewis had prepared a very fine dinner, everything served except the bread was raised on their farm and garden and the bread could have come from the farm had the weather not been so hot. No points were used in this meal which may give an idea to some other County Societies as to how to help out in the war.

Dr. John C. Baker and wife of Berea were honored guests of our society.

No paper was read, but carrying out our policy of holding a clinic at each of our meetings, Dr. Lewis presented a case of Cholera Morbus, in a bottle fed infant which proved to be very interesting and was discussed by all.

T. A. Griffith presented three eye cases and an 11 year old boy with inherited syphilis, which were discussed and proved of great interest.

J. C. Baker reported a very interesting case of eclampsia and his treatment of same.

It was voted to hold our next meeting with Drs. Garrett and McWilliams, Brodhead.

The Doctors' wives voted to form a county auxiliary and to meet each month with us.

R. G. Webb, Secretary.

Union: The Union County Medico-Dental Society met Tuesday night, August 3, 1943 at 7:00 o'clock at Calverts Restaurant in Morganfield. The Society went to the office of the County Health Department for its scientific meeting. The minutes were read and approved. A card from Dr. and Mrs. G. B. Carr and Dr. Elma Carr was read in appreciation for flowers sent for the funeral of Dr. Carr's mother. The Society was reminded to make reservations early if they intended to attend the Kentucky State Medical Association meeting in October at Louisville. Due to difficulty of securing meals and a place to eat, it was decided that it might be best to discontinue the meals prior to the meeting each month.

The following 16 mm color-sound motion pictures were shown: (1) Otoscope, (2) Otitis Media in Pediatrics.

Members present were: G. B. Carr, C. B. Graves, J. W. Conway, H. B. Stewart, D. M. Sloan, W. H. Puryear, Bruce Underwood.

There being no further business, meeting adjourned.

Bruce Underwood, Secretary.

NEWS ITEMS

One of the most important meetings with far-reaching effects was the first all-Kentucky Industrial Safety and Health Congress which was held at the Brown Hotel July 28th, under the auspices of the Commission of Industrial Relations of which Mr. William C. Burrow of Frankfort, is Commissioner, and the Director of the Bureau of Industrial Hygiene of the State Department of Health, Dr. W. E. Doyle.

Occupational Disease Hazards, Safety in Mines, Conservation of Manpower, and Fire Prevention were all given major consideration. The Honorable Wilson W. Wyatt and Governor Johnson gave the welcome addresses and the inspirational address was made by the late A. T. McCormack, State Health Commissioner.

Dr. James T. Windell, Louisville, age 78, urologist for fifty years, died on August 8th at his residence 2620 Dundee Road. Although not in the best of health, Dr. Windell held office hours regularly at his offices, 718 West Jefferson. A native of Harrison County, Indiana, he moved to New Albany shortly before entering the University of Louisville Medical School from which he was graduated in 1892. He was a former member of the American, Southern and Jefferson County Medical Societies.

Miss Vera Jones, 31, and Joseph Daniel Heitger, age 61, physician, were married in Louisville in the rectory of St. James Catholic Church by Monsinor E. E. Willett. The bride is the daughter of Dr. William Henry Vanderbilt Jones. Dr. Heitger, a native of Indiana, is a graduate of the University of Michigan and Indiana University and also studied abroad.

The Schering Award Competition is offered annually by the Schering Corporation for the purpose of stimulating a current interest in endocrinology among undergraduate medical students. Sponsored and administered by a special committee of the Association of Internes and Medical Students, the competition is now in its third year and it is evident from the excellent response among medical students, that the Schering Award has well fulfilled its original purpose. That two of the winners in this year's competition are women attests to their ever-increasing progress in the field of medical education. In all, a large number of excellent manuscripts were submitted, eliciting highly favorable comments from the Committee of Judges.

For further information write to Schering Corporation, No. 86 Orange Street, Bloomfield, New Jersey.

The Harvard Medical School, Courses for Graduates will offer a Seminar in Legal Medicine to occupy the week October 4 to 9, inclusive. It is planned particularly for medical examiners and coroners' physicians, but will be open also to any other suitable graduate of an approved medical school.

The course will be practical rather than theoretical and will consist of autopsy demonstrations, technique and interpretation of laboratory tests, study of the day-by-day cases of a medical examiner, round table conferences, and the many subjects now included in the widening field of legal medicine. In order that each participant may receive the maximum benefit, the enrollment has been limited to fifteen. For the Seminar the fee is $25. Application should be made on or before October 1 to Harvard Medical School, Courses for Graduates, 25 Shattuck St., Boston Massachusetts.

The Ninth Annual Meeting of the Mississippi Valley Medical Society will be held in Hotel Lincoln. Douglas Hotel, Quincy, Illinois, September 29, 30. There will be over thirty practical lectures and demonstrations, which will be crowded into two full days including exhibits, banquets and a complimentary Stag supper. Stagessess are not included.

BOOK REVIEWS

A MANUAL OF CLINICAL THERAPEUTICS: By Windsor C. Cutting, M. D., Associate Professor of Therapeutics, Stanford University School of Medicine, San Francisco, Calif. 609 pages. Philadelphia and London: W. B. Saunders Company, 1943. Price $4.00.

This manual is intended to be a compact and practical guide for students, internes and practitioners of medicine and will prove a valuable guide to those in service. It gives the specific medical treatment, not only of the diseases most commonly met with in general practice, but of tropical diseases as well, since the latter will undoubtedly be encountered with increasing frequency. Clinical and pharmacologic descriptions are brief, and wherever possible references to treatment suggested in current literature are given, preference being given to articles appearing in the Journal of the A.M.A.

THE ANATOMY OF THE NERVOUS SYSTEM: By Stephen Walter Ranson, M. D., Ph. D., Formerly Professor of Neurology and Director of Neurological Institute, Northwestern University Medical School, Chicago. Seventh Edition Revised. 520 pages with 408 illustrations some of them in colors. Philadelphia and London. W. B. Saunders Company, 1943. Price $6.50.

The material for this new seventh edition was entirely completed before the death of the distinguished author. This edition has been thoroughly revised, the chapter on sympathetic nervous system has been rewritten. Many chapters have been increased in length due to the rapid advances in the science of neurology. The terminology adopted is that of the B.M.A. in its English form.

PRINCIPLES AND PRACTICE OF WAR SURGERY WITH REFERENCE TO THE BIOLOGICAL METHOD OF TREATMENT OF WAR WOUNDS AND FRACTURES by J. Trueta, M. D., formerly director of Surgery, General Hospital of Catalonia, University of Barcelona, Assistant Surgeon (E.M.S.) Wingfield-Morris Orthopedic Hospital, Oxford, Acting Surgeon-in-charge Accident Service, Radcliffe Infirmary, Oxford. 425 pages, 144 illustrations. Price $7.50. C. V. Mosby Co., Publishers.

Possibly the greatest individual contribution to surgery of modern war, this timely new book reflects the author's vast experience in the Spanish War and in World War I.

Trueta sets forth precisely and in complete detail all the technical procedures which he has adopted as a result of his experience. Naturally, it is concerned in large part with those methods (i.e. wound excision and complete encasement of wounded limbs in plaster) which are now generally known as the Trueta technic; it also enters fully into such subjects as shock, transfusion, aerobic and anaerobic infections, including gas gangrene and tetanus, chemotherapy, antiseptics, anesthesia, skin grafting, amputation, and treatment of burns.

"War Surgery" is well illustrated with photographs and drawings. Particularly graphic are those which picture the preparation of the plaster cast, showing exact shapes and sizes of all the plaster patterns and methods of application —and those which illustrate step-by-step technic of wound incision and excision.

CREATINE AND CREATININE METABOLISM by Howard H. Beard, Ph. D., Professor and Director of the Department of Biochemistry, School of Medicine, Louisiana State University, New Orleans. Chemical Publishing Co., Inc., Brooklyn, N. Y. Price $4.00.

This book describes the results of the last 15 years' work in the field, with applications, wherever possible, to human metabolism and to diseases of the muscles and heart. Detailed instructions for the determination of creatine and creatinine in body tissues and fluids by the newer techniques are given. These may be used successfully by technicians not especially trained in analytical chemistry.

FRACTURES by Paul B. Magnuson, M. D., F. A. C. S., Associate Professor of Surgery, Northwestern University Medical School, Attending Surgeon, Passavant Memorial Hospital and Wesley Memorial Hospital, Chicago. 317 illustrations. Fourth Edition Revised. J. B. Lippincott Company, Philadelphia, Publishers. Price $5.50.

This treatise is written in an endeavor to meet the needs of the physician who first sees the fracture. An effort has been made to simplify the methods of treatment and to approach the problem of fractures from the standpoint of anatomy and physiology. This new edition has been prepared to meet conditions of war, additions have been made that deal with first aid, transportation and early treatment of compound fractures, the suggestions incorporated are not the author's alone but represent the consensus of the Committee on Orthopedic Surgery of the National Research Council as constituted at the publication of the edition.

THE PRINCIPLES AND PRACTICE OF OBSTETRICS: By Joseph B. DeLee, A. M., M. D., Formerly Professor of Obstetrics and Gynecology, Emeritus, University of Chicago. Consultant in Obstetrics, Chicago Lying-in Hospital and Dispensary; Consultant in Obstetrics, Chicago Maternity Center; and J. P. Greenhill, B. S., M. D., Attending Obstetrician and Gynecologist, Michael Reese Hospital; Obstetrician and Gynecologist, Associate Staff Chicago Lying-in Hospital; Attending Gynecologist, Cook County Hospital; Professor of Gynecology, Cook County Graduate School of Medicine. Eighth Edition, Entirely Reset. 1101 pages with 1074 illustrations on 841 figures, 209 of them in colors. Philadelphia and London: W. B. Saunders Company, 1943. Price $10.00.

The popularity of this book is attested by the new eighth edition which was prepared by his collaborator, Dr. Greenhill, two years before Dr. Lee's death. All the deletions, additions and corrections received the author's approval. Several chapters and sections have been completely rewritten, notably those on the toxemias of pregnancy. Many of the old illustrations have been omitted and a large number of new ones added.

Among the major changes made is a rearrangement of the material in the first third of this book. Another important change is the substitution of English terms for the Latin ones in the designation of presentations and positions. This is a monumental advance in obstetrics.

VITALITY THROUGH PLANNED NUTRITION by Adelle Davis, A. B., M. S., Consulting Nutritionist, Author of Optimum Health and You Can Stay Well. The MacMillan Company, Publishers, New York.

The purpose of the book is to portray the relationship of nutrition to health and vitality, which are the foundation of human happiness.

The author has tried to tell the story of nutrition in a language understandable to high school students and in a manner which would make them want to apply their knowledge immediately and throughout all the years. The physician can also gleam a wealth of practical information from this volume.

CLINICAL DIAGNOSIS by Laboratory Methods: By James Campbell Todd, Ph. B., M. D., Late Professor of Clinical Pathology, University of Colorado, School of Medicine; and Arthur Hawley Sanford, A. M., M. D., Professor of Clinical Pathology, University of Minnesota (The Mayo Foundation) Head of Division on Clinical Laboratories, Mayo Clinic. Tenth Edition, Thoroughly Revised. 911 pages with 380 illustrations, 32 in colors. Philadelphia and London: W. B. Saunders Company, 1943. Price $6.00.

This volume is one of the best guides for laboratory students and its real worth can be realized when you consider that for thirty years, through ten editions, it has been the "family bible" of Laboratory Methods.

In this new edition obsolete methods have been dropped, much new material and a large number of illustrations have been added. It includes the latest methods for determining the quantity of sulfonamide and sulfones in the blood and the identification of their crystals in the urine.

The chapters on the serodiagnostic tests for syphilis include the new Mazzini Test. Four new plates in color have been added. A special feature of this book and one which especially commends it to the practicing physician, is that it includes those tests that can be performed in the physician's own laboratory.

THE INFECTIOUS DISEASES OF DOMESTIC ANIMALS by William Arthur Hagan, D. V. M., D. Sc., Professor Bacteriology and Dean of the Faculty New York State Veterinary College Cornell University. Comstock Publishing Company, Inc., Ithaca, N. Y.

As more and more has been learned concerning the specific etiology of infectious diseases, more and more of these diseases have been found to be primarily diseases of lower animals and transmitted to man only accidentally. The occurrence of these diseases in both man and animals has established a direct relationship between these two fields of medicine.

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The libraries of few practicing physicians contain texts or other literature in which this later information is readily available. This new text provides this information. The book is written in plain, easily understandable language giving the impression that the author is thoroughly familiar with the known facts about each of the animal diseases discussed.



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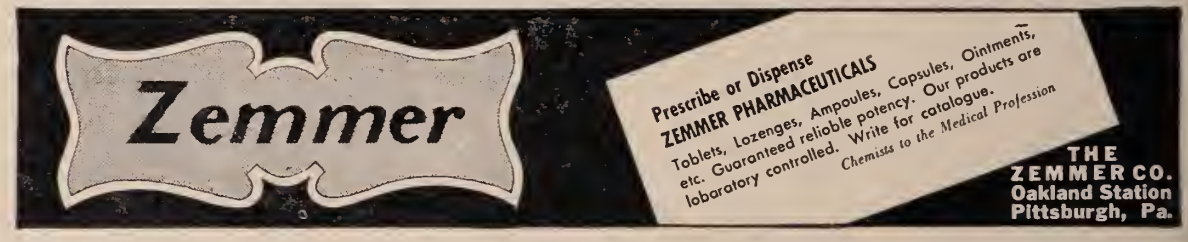
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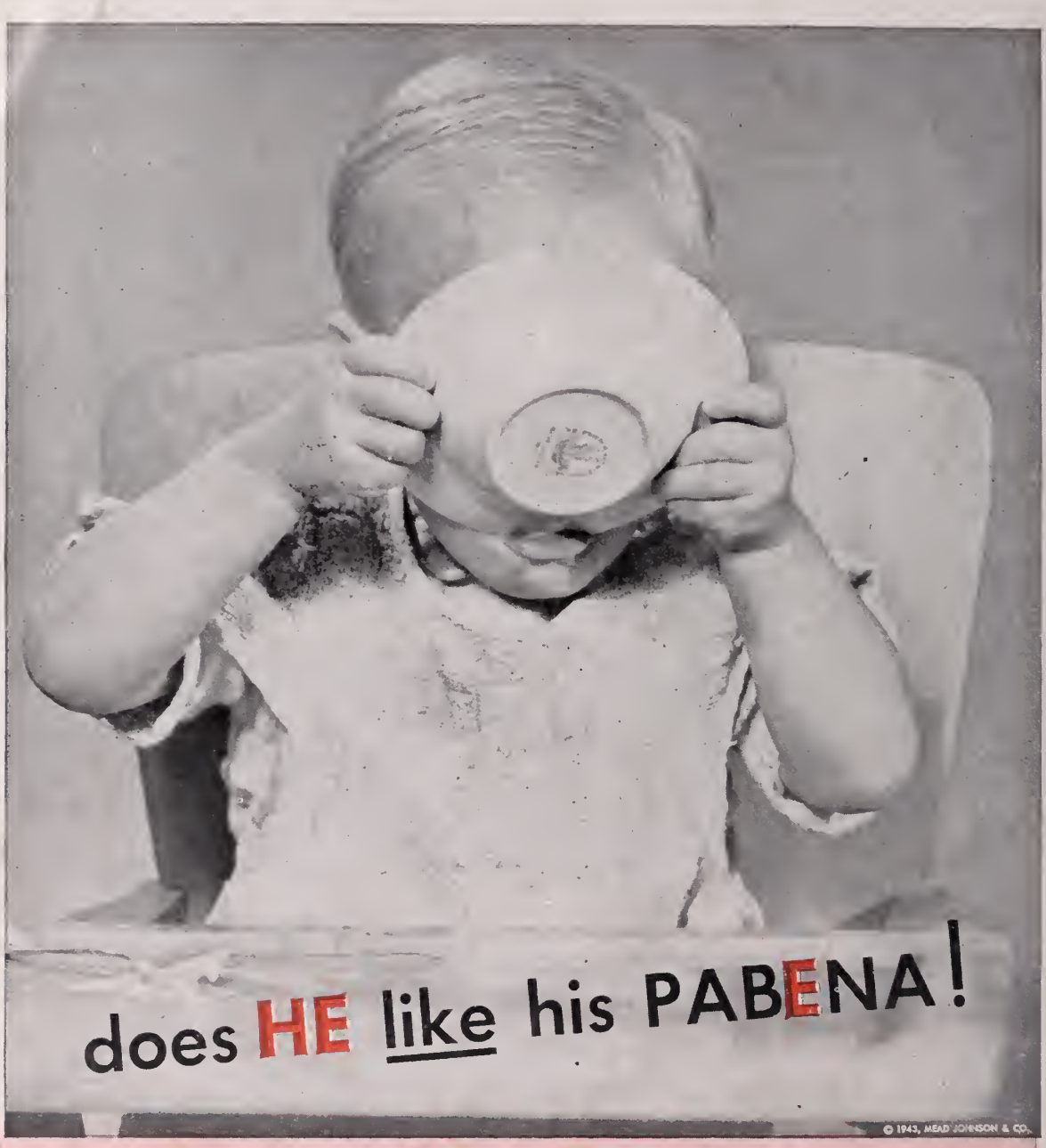
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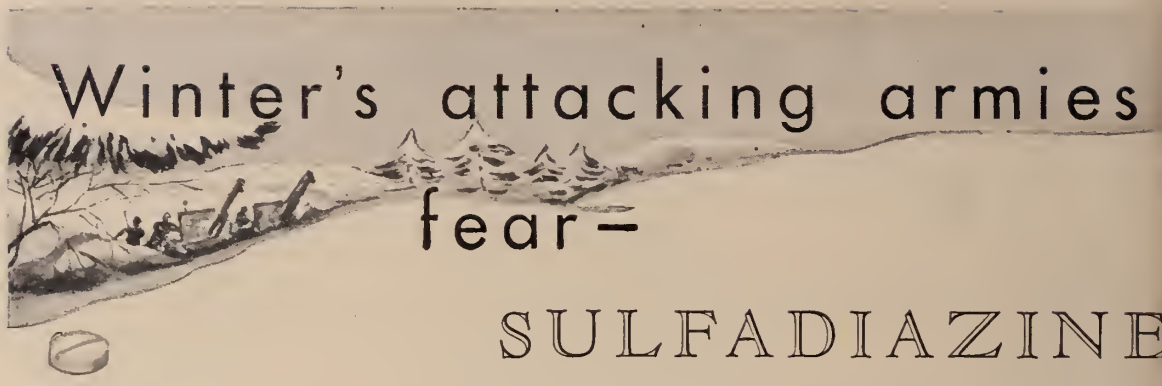
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Boyle	P. C. Sanders	Danville	October 19
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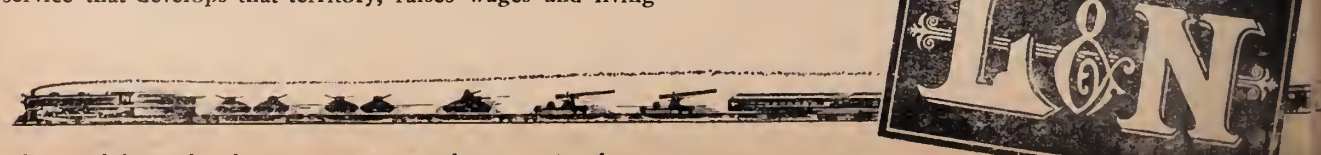
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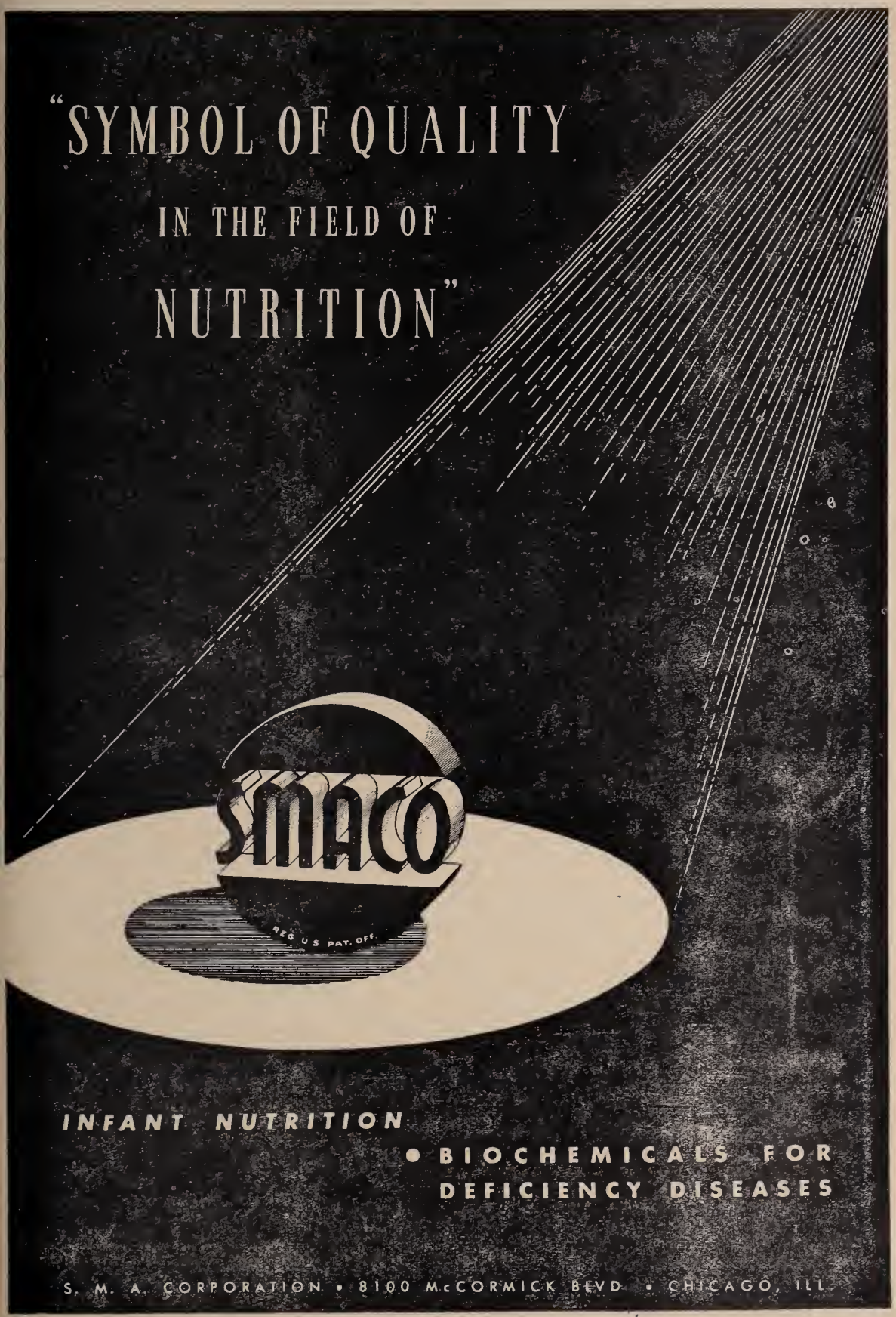
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FACTS DOCTORS SHOULD HAVE ON

THE ACTIONS OF WINE



Published by the Wine Advisory Board

AN entire generation of physicians lost touch with the medical lore of wine in the United States following the first World War. Actually, however, few other substances have been as widely recommended. This monograph, which summarizes the pertinent scientific literature in the interest that fact be separated from folklore by the application of impartial analysis, will prove of interest and value to specialists in many fields, and to the general practitioner as well.

A section on wine as a food is included. The actions of wine on the gastro-intestinal system. the cardio-vascular system, the genito-urinary system, the nervous system and the muscles, and the respiratory system are discussed. The uses of wine in diabetes mellitus, in acute infectious diseases and in treatment of the aged and convalescent are dealt with. There is a section on the value of wine as a vehicle for medication. Also an important section on the contraindications to the use of wine. Those who wish to pursue the subject further will find an extensive bibliography.

This review results from a study supported by the Wine Advisory Board, an agricultural industry administrative agency established under the California Marketing Act, and has been sponsored by the Society of Medical Friends of Wine.

Members of the medical profession are invited to write for this monograph. Requests should be made to the Wine Advisory Board, 85 Second Street. San Francisco.

In the "Chronic Fatigue" of Mild Depression



After employing Benzedrine Sulfate therapy in a series of 40 patients diagnosed as suffering from nervous exhaustion, Nathanson concludes:

"In approximately 80 percent of the patients there was a marked amelioration of this symptom (fatigue). Many of the patients had complained of fatigue for long periods and had tried various types of treatment without benefit . . .

"A sense of increased energy and capacity for work was noted in more than half of the cases. In addition a feeling of exhilaration and sense of well being was a consistent effect . . . Many patients volunteered that there had been a definite increase in mental activity and efficiency." Nathanson, M. H.—J. A. M. A., 108:528, 1937.

Benzedrine Sulfate Tablets

Brand of racemic amphetamine sulfate

Benzedrine Sulfate is primarily useful in depressions characterized by apathy and psychomotor retardation, but is contraindicated in patients manifesting anxiety, hyperexcitability, or restlessness.

The use of Benzedrine Sulfate by normals should not be permitted; it should always be administered under the careful supervision of a physician; and depressive psychopathic cases should be institutionalized.

In treating depressed patients with Benzedrine Sulfate, the physician should bear in mind that any drug which produces pleasant or euphoric effects may prove to be habit forming—especially in unstable or neurotic individuals

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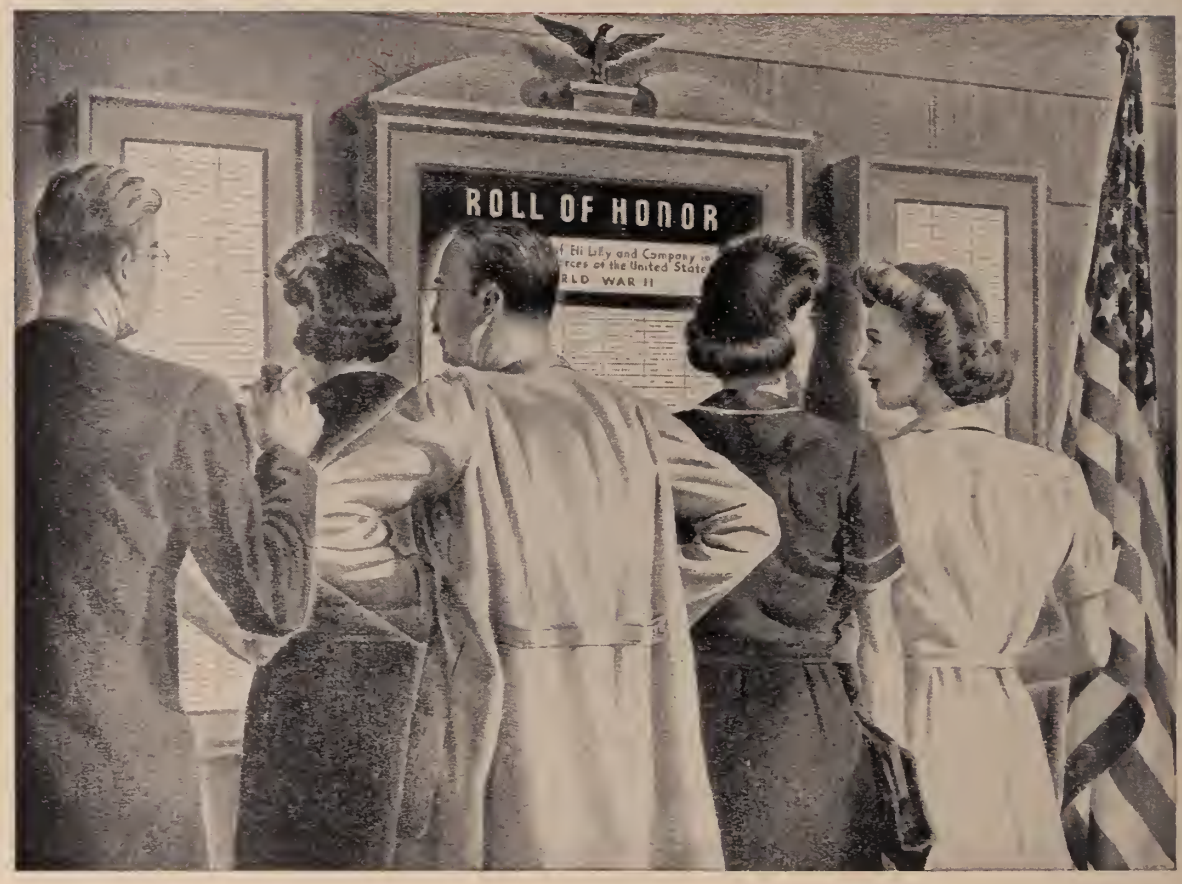
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KENTUCKY MEDICAL JOURNAL

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

VOL. 41, NO. 10 BOWLING GREEN, KY. OCTOBER, 1943

MORE PHYSICIANS REQUIRED FOR THE ARMY

Through an Editorial in The Journal of the American Medical Association in its August 7 issue, the medical profession of the country is put on notice that the Armed Forces must be supplied with 6,000 additional physicians before January 1, 1944. This is a challenge that will require courage as well as good judgment on the part of the leaders in the profession who have assumed responsibility in connection with Procurement and Assignment for physicians, because, in a number of States recruitment has already resulted in deleting medical services for the people to the point where many questions have been raised as to whether the health of the people can be safeguarded and medical relief assured to a reasonably satisfactory degree. To date, in our own State of Kentucky there are quite a number of communities not only without reasonably adequate medical supply but with practically none.

National Procurement and Assignment is scanning the list of physicians whose availability has been postponed from time to time and also that of the physicians who had been rejected heretofore because of minor physical defects. The purpose of this is to ascertain whether there are still some physicians in Kentucky who could be available for the Armed Forces. As this Editorial is written, there has applied to the Army Procurement Service office in Louisville a number of our younger physicians who have heretofore been temporarily deferred or who are on nonavailability lists because of previous rejection.

The profession is reminded that the Selective Service limit of 38 years does not apply in the matter of a declaration of availability by Procurement and Assignment, and, therefore, all men between 38 and 45 heretofore held available and who have not applied for a commission will be expected to report for examination.

Probably no other profession has responded so readily to the Army's demand and made voluntary enlistments comparable to that of the medical profession. In this fact our physicians take great pride.

We quote from an editorial in the August 7 issue of The Journal of the American Medical Association:

"If there is any physician who still hesitates under these circumstances, he should realize the added advantage to him of accepting now the commission that is proffered. Should it become necessary in the near future, as seems quite likely, to enlist new activity by the Selective Service Administration and the Officers' Procurement Service to bring in the six thousand physicians that are so certainly required, those recruited by that technic will inevitably begin their service with the minimum commission that is offered, namely that of first lieutenant. Until that technic is installed, the men of special competence and of years beyond those of the recent graduate have the assurance of careful consideration and a commission more nearly in accordance with age and experience."

In order that the physicians of the State may understand the situation in relation to the accelerated medical education program and its contribution to the supplying of physicians for both Army and civilian needs, we quote from an editorial in the August 14 issue of The Journal of the American Medical Association:

"More than 4,000 seniors who entered the accelerated medical education program over a year ago are now well into their intern year and will complete that training before March 31, 1944. They will thus become available for military and civilian practice three months earlier than in normal times. Even half of these, should only that small proportion be commissioned, can care medically for over 300,000 troops."

THE PROGRAM

We are indebted to the Program Committee of the Kentucky State Medical Association, composed of Drs. O. O. Miller, Chairman, H. M. Weeter, F. G. Speidel and E. L. Henderson, and to the Regional Committee of the Wartime Graduate Medical Meetings, composed of Drs. E. L. Henderson, Chairman; C. W. Dowden, Kentucky, and H. H. Shoulders, Tennessee, for the splendid program of the meeting.

THE WAGNER-MURRAY-DINGELL BILL

Probably nothing in the way of proposed legislation, on either a National or a State level has ever in the history of American medicine so aroused the profession as has this Bill. The Journal of the American Medical Association and State medical journals, from coast to coast, have carried editorials, news analyses and comments intended to attract the attention of physicians and stimulate reaction to the evident intention of the Bill's authors to revolutionize the practice of medicine by setting up a federalized plan under which more than half the people of this country would have medical, hospital and related services provided for them on a compulsory basis, affecting, to a very great extent, the inherent right of free choice—the patient's right to follow his own wishes, and the doctor's right to respond voluntarily.

The proposal may well be styled a Social Security Omnibus Bill, since it includes provisions for old age and survivor's benefits, disability benefits, military service benefits, unemployment insurance benefits, maternity benefits, medical and hospitalization benefits, and a broadening of all the now existing Social Security programs. The total cost runs into so many billions of dollars that it staggers the imagination and will surely shock the economic sensibilities of all who are required to provide the cost—taxpayers and beneficiaries. For medical and hospital care of the sick and injured alone it is estimated that the cost will exceed three billion dollars. Comments from spokesmen of the medical profession indicate that the entire resources of organized medicine will be marshalled for an aggressive campaign against the passage of any legislation which seeks, as this Bill apparently does, to bring about a regimentation of the doctor and his patient, and proscribe the progress of scientific medicine by interfering with the initiative of the former in his unselfish efforts to acquire new knowledge, to practice his art unhampered, and to maintain professional standards that have been developed over a century by devoted and self-sacrificing men of medicine.

Every doctor in Kentucky is urged to keep himself informed through reading regularly the Journal of the American Medical Association. Senate Bill No. 1161 will probably come up for consideration in the next session of Congress convening this month.

OUR GUEST SPEAKERS



ARTHUR WILBURN ALLEN, M. D.
Boston, Mass.

Dr. Allen is a graduate of the Johns Hopkins University School of Medicine; Chief of East Surgical Service, Massachusetts General Hospital and Consultant Surgeon for several other Boston Hospitals. He is a lecturer in Surgery at the Harvard Medical School, and a member of many medical societies.



ARNOLD J. BARGEN, M. D.
Rochester, Minn.

Dr. Bargen, a native of Minnesota, holds an M. S. degree from the University of Minnesota and an M. D. from the Rush Medical College, Chicago. He is Associate Professor of Medicine, Mayo Foundation, Head of the Department of Intestinal Diseases.



LIEUTENANT COLONEL CLAUDE S. BECK, M.C.
Cleveland, Ohio

Dr. Beck was born in Shamokin, Pennsylvania, and received his M. D. degree from Johns Hopkins and became Assistant Resident Surgeon New Haven

Hospital, and later Associate Surgeon Peter Bent Brigham Hospital, Boston. He received additional surgical training at Harvard University and the Crile Clinic and was Professor of Neuro-Surgery Western Reserve University. He is a member of various medical societies of his profession.



EDWARD L. TURNER, M. D.
Nashville, Tenn.

Dr. Turner was born in Alton, Illinois, receiving his academic degrees of B. S. and M. S. from the University of Chicago, and the degree of M. D. from the University of Pennsylvania, School of Medicine. For many years he was connected with the American University of Beirut, Syria, serving successively as Professor of Physiology, Internal Medicine and Acting Dean. He is the author of many publications in the field of physiology and medicine.



WARREN HENRY COLE, M. D.
Chicago, Ill.

Dr. Cole, a native of Kansas, holds a B. S. degree from the University of Kansas and an M. D. from Washington University School of Medicine, St. Louis. Since 1936 he has been Professor and head of the Department of Surgery, University of Illinois College of Medicine. Dr. Cole is the author of a text-book on General Surgery and holds membership in numerous surgical and scientific societies.



ROY R. KRACKE, M. D.
Atlanta, Ga.

Dr. Kracke is a native of Alabama and a graduate of the University of Alabama with a degree of B. S. He received his M. D. degree from the University of Chicago and is now Professor of Pathology, Emory University, Atlanta. Dr. Kracke is the author of a text-book on Clinical Pathology and is a frequent contributor to various medical journals.



EUGENE ANSON STEAD, JR., M. D.
Atlanta, Ga.

Dr. Stead holds the degrees of B. S. and M. D. from Emory University, Atlanta. He served his medical and surgical internships at the Peter Bent Brigham Hospital and was for one year Research Fellow in Medicine, Harvard Medical School. He is now Professor of Medicine, Emory University.



ALEXANDER EDWARD BROWN, M. D.
Rochester, Minn.

Dr. Brown, a native of Colorado, graduated from the University of Minnesota

School of Medicine with a degree of M. D. and afterwards received the degree of M. S. in Medicine from that institution. He is the Assistant Professor of Medicine, Mayo Foundation, Graduate School of Medicine, Minnesota University.

Lieutenant Colonel B. N. Carter, M. D.
Washington, D. C.

Lieut. Colonel Carter is a native of Virginia and received his medical degree from the University of Virginia School of Medicine. He was Associate Professor of Surgery, University of Cincinnati until 1942 when he entered the Service. He is now Director, Surgical Division, Office of the Surgeon General War Department.

OFFICIAL ANNOUNCEMENTS

PRELIMINARY PROGRAM
Kentucky State Medical Association
Louisville
October 4, 5, 6, 1943

Tuesday, October 5
9:00 A. M.

Call to Order by the President
.....E. M. Howard, M. D.
Harlan

Invocation.....Reverend Roy H. Short
Pres. Louisville Ministerial Association
Louisville

Installation of President
Greeting and Report on Arrangements
.....B. W. Smock, M. D.
Pres. Jefferson County Medical Society
Louisville

Scientific Session
Tuesday, October 5
9:30 A. M.

Burns, Shock, Blood Derivatives

1. Burns.....Lieut. Colonel Claude S. Beck
Cleveland
2. Shock.....Eugene A. Stead, Jr., M.D.
Atlanta
3. Blood Derivatives.Roy R. Kracke, M.D.
Atlanta
4. Medical and Surgical Diseases of the Prostate Gland
.....Herman L. Kretschmer, M.D.
Chicago

Special Order
12:00 M

Oration in Medicine
.....Charles B. Stacy, M. D.
Pineville

Tuesday, October 5
2:00 P. M.

Chemotherapy

1. Chemotherapy in Digestive Organs
.....J. A. Bargen, M. D.
Rochester, Minn.
2. Chemotherapy: (a) In Genito-Urinary Infections
(b) General Consideration
.....A. E. Brown, M.D.
Rochester, Minn.
3. The Preoperative and Postoperative Use of Sulfonamides and the Prevention of Wound Infections
.....J. A. Bargen, M. D.
Rochester, Minn.
4. The Treatment of Bacterial Meningitis
.....A. E. Brown, M. D.
Rochester, Minn.

Tuesday Evening, October 5
Social Hour
6:00 P. M.

Annual Subscription Dinner
6:45 P. M.

1. We Are Not Content
.....Brig. Gen David N .W. Grant
Washington, D. C.
2. Current Trends in Military Surgery
.....Brig. Gen. Fred W. Rankin
Washington, D. C.
and
Lieut. Col. B. N. Carter
Washington, D. C.
3. Why the American Medical Association
or
Impact of War on American Medicine
.....Herman L. Kretschmer, M.D.
Chicago

Wednesday, October 6
9:30 A. M.

General Surgery

1. Gastric and Duodenal Ulcers: Surgical Management.....A. W. Allen, M.D.
Boston
2. Gas Gangrene W. H. Cole, M.D.
Chicago
3. Neurovascular Lesions of the Extremities A. W. Allen, M.D.
Boston
4. Intestinal Obstruction
.....W. H. Cole, M.D.
Chicago

Special Order
12:00 M

Oration in Surgery....W. B. Smock, M.D.
Louisville

Wednesday, October 6
1:30 P. M.

1. Classification of Dysenteries
.....E. L. Turner, M.D.
Nashville

2. Bacillary Dysentery..E. L. Turner, M.D. Nashville
3. Thrombophlebitis and Pulmonary Embolism.....A. W. Allen, M. D.. Boston
4. Amebiasis E. L. Turner, M. D. Nashville
5. Other Intestinal Protozoal Infections E. L. Turner, M.D. Nashville
6. Helminthous Dysentery E. L. Turner, M. D. Nashville

HONOR ROLL
KENTUCKY PHYSICIANS IN THE ARMED SERVICE WORLD WAR II

Anderson
Lawson, Rueben N., Lawrenceburg

Barren
Burks, James M., Cave City
Dickinson, John, Glasgow
Hayes, Rex E., Glasgow
Jackson, Vester A., Glasgow
Peterson, Gilman, P., Cave City
Wells, William C., Glasgow
York, Paul S., Glasgow

Bell
Asher, Jr., George M., Pineville
Bolls, George F., Middlesboro
Brummett, Chester C., Middlesboro
Cowan, Albert W., Middlesboro
Flowers, Samuel H., Middlesboro
Stacy Jr., Adam, Pineville

Boone
Daugherty, Harry R., Florence
Kaufman, Julian R., Walton

Bourbon
Link, Melvin R., Paris
Morgan, William S., Paris
Pittenger, Byron N., Paris
Rickman, Samuel M., Paris

Boyd
Bell, George M., Ashland
Gardner, Richard W., Ashland
Garred, Mathew D., Ashland
Martin, Herman, E., Ashland
Moore, James E., Ashland
Prichard, Hubert J., Catlettsburg
Sparks, Clyde C., Ashland
Stone, Harry J., Ashland
Veirs, Everett R., Ashland
Williams, Walter F., Ashland
Woods, Clifford C., Ashland

Boyle
Caldwell, Jr., Charles W., Danville
Caywood, Beatty E., Danville
Ellis, Stephen R., Danville
Hemphill, Stuart P., Danville
McClure, George M., Danville

Bracken
Marquardt, Carl A., Augusta
Work, Charles E., Augusta

Breathitt
Bress, Philip, Jackson
Sewell, Frank K., Jackson

Caldwell
Amos, B., Kirtley, Princeton
Barnes, Kenneth L., Princeton

Calloway
Fisher, Edison D., Murray
Garrett, Evan L., Murray
Hahs, Robert W., Murray
Houston, Hal E., Murray

Campbell
Biltz, Stuart G., Newport
Boeh, Daniel, Newport
Caldwell, Milton V., Newport
Dorroh, Glenn U., Ft. Thomas
Donnelly, Joseph L., Ft. Thomas
Eith, Gustave T., Newport
Faulkner, Joseph S., Bellevue
Haizlip, James O., Ft. Thomas
Hermann, George J., Newport
Helmbold, August F., Newport
Hoffman, Carl G., Southgate
Huesing, William I., Ft. Thomas
Perrine, G. B., Dayton
Poweleit, Alvin C., Newport
Reitz, John F., Newport
Rust, Richard J., Newport
Schultz, Arthur, F., Ft. Thomas
Schwegman, Marcellus, J., Ft. Thomas
Stratman, Edward J., Newport
Vesper, Jr., J. Albert, Newport
Weaver, Raymond H., Ft. Thomas
Welte, Jr. Fred H., Newport

Carroll
Gaines, Jr., Frank M., Carrollton
Flaherty, Walter T., Carrollton

Carter
Strother, Robert B., Grayson

Christian
Brown, Felix M., Hopkinsville
Clardy, Delmas M., Hopkinsville
Garner, John R., Lafayette
Haynes, Philip E., Hopkinsville
Pryor, George E., Hopkinsville
Rice, John R., Hopkinsville

Clark
Clark, Garland H., Winchester
Guerrant, Edward O., Winchester
Strode, Ernest C., Winchester
Strode, Robert E., Winchester

Clinton
Hay, Floyd B., Albany

Cumberland
Schickel, Joseph, Burkesville

Daviess
Barr, Robert H., Owensboro

Burkhead, Naaman H., Owensboro
Davis, Howell J., Owensboro
Dixon, John L., Owensboro
Dodson, Leslie C., Owensboro
Hix, James E., Owensboro
Milton, Thomas H., Owensboro
Oldham, William J., Owensboro

ESTILL

Marcum, Samuel G., Irvine

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Adams, Theodore L., Lexington
Adkins, Hugh P., Lexington
Alexander, Alexander J., Lexington
Andrews, Kenneth R., Lexington
Barrett, Arthur B., Lexington
Barrow, David W., Lexington
Baker, Samuel R., Lexington
Cantey, Jr., Samuel O., Lexington
Combs, Arnold B., Lexington
Coleman, John C., Lexington
Cundiff, Morton A., Lexington
Eckenhoff, James E., Lexington
Elliott, Jr., Richard G., Lexington
Fortune, Carl H., Lexington
Griffin, Robert J., Lexington
Gragg, Jr., Logan, Lexington
Harvey, Jr., John, Lexington
Heizer, Jr., William L., Lexington
Hurt, Lawrence E., Lexington
Johnston, Coleman C., Lexington
Jones, Marshall M., Lexington
Kanner, Irvine F., Lexington
Leader, Samuel A., Lexington
Leet, Hanson H., Lexington
Lipscomb, William N., Lexington
Lowry, Thomas M., Lexington
Maxson, William T., Lexington
McLean, Charles G., Lexington
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Moore, Escum L., Lexington
Moberly, Fred P., Lexington
Myers, Ernest E., Lexington
Parks, Stanley S., Lexington
Pennington, William H., Lexington
Perry, Claud W., Lexington
Porter, Charles B., Lexington
Prewitt, John H., Lexington
Rankin, Fred W., Lexington
Ray, Edward H., Lexington
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Riggs, Robert C., Lexington
Rodgers, B. D., Lexington
Rompf, John H., Lexington
Scott, A. T., Lexington
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Warfield, Robert B., Lexington
Welch, Ernest A., Lexington
Wheeler, Jr., Carl L., Lexington
Williams, Samuel E., Lexington
Young, Jr., John D., Lexington

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Cummings, John R., Flemingsburg

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Dillard, Harry K., Wayland
Gearheart, Orris, Martin
Kaminski, Theodore J., Wayland
Messer, Clarence R., Lackey

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Blackburn, Winfrey P., Frankfort
Coleman, Robert M., Frankfort
Cull, Leighton L., Frankfort
Leonard, Thomas P., Frankfort
Marshall, Thomas M., Frankfort

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Bushart, Robert, Fulton
Hancock, James C., Fulton
Rudd, Robert R., Fulton
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Scroggin, Frederick R., Mason
Sugarman, Benjamin E., Williamstown

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Mayer, James A., Mayfield
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GREENUP

Holbrook, Paul E., Greenup

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Carrigg, Lawrence G., Elizabethtown
Roberts, Daniel T., West Point

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Carr, Jr., Arch M., Alva
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Foley, James D., Loyall
Giannini, John T., Kenvir
Howard, Moses W., Harlan
Kirkendall, Walter W., Kenvir
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Miller, Emmett H., Harlan
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Baker, Simeon S., Louisville
Banks, Duane E., Louisville
Bate, Jr., Richard A., Louisville
Baer, Louis, Louisville
Bate, John T., Louisville
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Bell, Joseph C., Louisville
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Bloch, Winston N., Louisville
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Dent, Paul L., Louisville
Dierking, William E., Louisville
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Dravo, Emory L., Louisville
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Hart, Walter M., Louisville
Haynes, Allan L., Louisville
Hancock, James D., Louisville
Hall, Delon P., Louisville
Heitz, Raymond, Louisville
Henderson, Norman C., Louisville
Hill, John C., Louisville
Hoffman, Delbert G., Louisville
Howland, Bernard U., Louisville
Hurst, Arthur T., Louisville
Humbert, James, Louisville
Imes, Pat R., Louisville
Jasper, Robert B., Louisville
Johnson, William O., Louisville
Kaplan, Ronald, Louisville

Kasey, Jr., Arthur R., Louisville
Keaney, Jr., John M., Louisville
Keller, Billy K., Louisville
Kennedy, Archibald D., Louisville
Kinsman, James M., Louisville
Kremer, Jr., Eugene H., Louisville
Krupp, Abraham W., Louisville
Leatherman, Kenton D., Louisville
Leonard, Stewart W., Louisville
Lemtini, Vincent, Louisville
Long, Robert C., Louisville
Love, Jesshill, Louisville
Loveman, Adolph B., Louisville
Lucas, Marvin A., Louisville
Mack, John K., Louisville
Mann, Shelton H., Louisville
Mapother, Paul, Louisville
Marshall, Jennings B., Louisville
Martin, Jr., William J., Louisville
McCarty, Arthur C., Louisville
McLain, Ernest C., Louisville
McNeill, Clyde, Louisville
Merlis, Jerome K., Louisville
Middlestadt, Edwin F., Louisville
Minish, Lawrence T., Louisville
Miller, Alfred O., Louisville
Miller, Robert C., Louisville
Mitzlaff, Louis O., Louisville
Moore, Frank H., Louisville
Moore, Jerome A., Louisville
Moore Jr., Roy H., Louisville
Morris, Donald P., Louisville
Monroe, Robert F., Louisville
Moorman, Chapman S., Louisville
Mullen, Alvin B., Valley Station
Nagel, Louis, Louisville
Noble, Vernan A., Louisville
Ockermann, Kenneth R., Louisville
Ogden, Owen S., Louisville
Osburn, Robert P., Louisville
Overstreet, Ralph, Louisville
Overstreet, Sam A., Louisville
Pauli, Augustus J., Louisville
Patterson, Jr., Robert F., Louisville
Palmer, Lee, Louisville
Petro, George J., Louisville
Pearlman, Reuben C., Louisville
Peters, John R., Louisville
Pfingst, Harry A., Louisville
Phillips, Jr., Thomas L., Louisville
Plymale, Francis G., Louisville
Porter, Richard C., Louisville
Powell, Jr., Frank M., Louisville
Pryor, Will R., Louisville
Query, Jr., Luke W., Louisville
Quinn, Charles S., Louisville
Reid, Ben A., Louisville
Richey, Harper E., Louisville
Rosenbaum, Jr., Irving, Louisville
Rosenblatt, William H., Louisville
Roser, Jr., Charles L., Louisville
Rulander, Fred W., Louisville
Sanders, R. Douglas, Louisville
Schlinger, George A., Louisville
Schneider, Bernard, Louisville
Schumann, George N., Louisville
Seay, Horace H., Louisville
Shacklette, Cripps B., Louisville
Shaper, Aaron A., Louisville
Shaw, Houston W., Louisville
Slucher, Richard R., Louisville
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Solomon, Jr., Edwin P., Louisville
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Spurling, R. Glen, Louisville
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Stites, John, Louisville
Stites, James R., Louisville
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Thompson, Morris H., Louisville
Thompson, Malcolm D., Louisville
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Townes, Charles D., Louisville
Traub, David S., Louisville
Tracy, Edward J., Louisville
Troutman, Woodford B., Louisville
Venable, Harry W., Louisville
Vincent, Edward H., Louisville
Wald, Herbert, Louisville
Webb, Jack G., Louisville
Weems, Mallory P., Louisville
White, Edgar C., Louisville
White, George A., Louisville
Wheeler, Owen M., Louisville
Wier, James A., Louisville
Wilhelmus, Charles K., Louisville
Williams, Frederick M., Louisville
Wolfe, William C., Louisville
Zimmerman, Leo, Louisville

JOHNSON

Akin, Jr., William E., Paintsville
McEwen, John C., Van Lear
Slone, Augustus D., Paintsville

KENTON

Air, Clements W., Ludlow
Bieber, Herbert F., Covington
Coe, George R., Erlanger
Collins, Grover C., Covington
Davison, Leo E., Covington
Dorger, John A., Covington
Ellis, Edward W., Erlanger
Hess, Peter W., Covington
Hoy, Jr., Robert T., Covington
Houston, Wilbur R., Erlanger
Huey, James M., Covington
Humpert, Joseph H., Covington
McAtee, John D., Covington
Pierce, Warren J., Covington
Quill, Laurence M., Covington
Reichert, Robert E., Covington
Reik, Louis, Covington
Riffe, James C., Covington
Rich, Murray L., Covington
Rolf, John J., Covington
Schultze, Joseph H., Covington
Walsh, Maurice R., Covington
Weber, Melvin J., Ludlow

KNOX
Clifton, Wilburn P., Barbourville
Shifley, Glenn M., Barbourville
LARUE
Handley, John D., Hodgenville
LAUREL
Mahon, George S., London
LEE
McCollum, Wendell D., Beattyville
LETCHER
Howard, Russell B., McRoberts
Johnson, James E., Jenkins
Kelsall, Harvey I., Jenkins
Pigman, Carl, Whitesburg
Stephens, Wilson P., Jenkins
Webb, Richard B., McRoberts
LINCOLN
Bradshaw, Jr., Wilber V., Stanford
Jakeman, Harry A., Stanford
McAtee, Ott B., Stanford
LOGAN
Glenn, John P., Russellville
Lamb, William F., Russellville
McCRACKEN
Albritton, James E., Paducah
Eaton, Jr., James V., Paducah
Robertson, Robert W., Paducah
Rosenberg, Theodore, Paducah
Swann, Layson B., Paducah
Washburn, Burton A., Paducah
McCREARY
Blackerby, James, Stearns
Phillips, Irwin E., Worley
MADISON
Bateman, Robert C., Richmond
Billington, Charles B., Richmond
Blanton, Harvey C., Richmond
Boneta, Thomas L., Richmond
Robbins, Ballard F., Berea
Wright, Kenneth W., Berea
MARION
Clarkson, Samuel C., Lebanon
Rader, Ben B., Lebanon
MARSHALL
Green, Norvel E., Benton
MASON
Parker, Harold N., Maysville
Prindle, Clair G., Maysville
Savage, W. M., Maysville
MEADE
Buckhold, Wilbert W., Brandenburg
Haynes, Jr., Boyd W., Brandenburg
MERCER
Ballard, Gyrlee T., Burgin
Humphrey, Edward C., Harrodsburg
Lowrey, George E., Harrodsburg
Meredith, Thomas O., Harrodsburg
Van Arsdall, Jr., Condit B., Harrodsburg
MONROE
Carter, Tim L., Tompkinsville
MONTGOMERY
Evans, Orville T., Mt. Sterling
Hunter, Robert G., Mt. Sterling
MORGAN
Murray, Hershell B., West Liberty
Wright, William L., West Liberty
MUHLENBERG
Moore, Loran, P., Greenville
Wilson, Foster M., Greenville
NELSON
House, Hugh E., Bardstown
OHIO
Barnes, Malcom, Beaver Dam
Bennett, Charles R., Hartford
Crowder, Marion O., Hartford
Lake, Willard, McHenry
Threlkel, Frank H., Beaver Dam
OLDHAM
Walsh, John T., LaGrange
PENDLETON
Townsend, William M., Falmouth
PERRY
Aker, John R., Allock
Combs, Lyndon F., Blue Diamond
Evans, Sandidge, Daisy
Faulkner, Charles R., Hazard
Hagan, James E., Hazard
Howard, Robert S., Daisy
Kash, Vernon O., Kodak
Payne, Minor B., Blue Diamond
Pigman, Alger B., Allock
Ray, Joseph M., Allais
Wright, Alonzo W., Hazard
PIKE
Berman, Henry I., Pikeville
Bond, Albert H., Hardy
Cloyd, William C., Stone
Doty, Tracy I., Majestic
Gose, William C., Pikeville
Looney, John E., Praise
Wright, Earl P., Pikeville
PULASKI
Hall, Charles N., Somerset
Holtzclaw, Morris R., Somerset
Spradlin, Marion C., Somerset
Wahle, Livingston A., Somerset
Wahle, August J., Somerset
RUSSELL
Zeier, Francis G., Jamestown
SCOTT
Covington, Aubrey Y., Georgetown
Wells, Henry G., Georgetown
Wilt, Frederick W., Georgetown
SHELBY
Doak, Alfred D., Shelbyville
Klein, Max D., Bagdad
Ransdall, Jr., Herbert T., Shelbyville
SIMPSON
Beasley, Lillard F., Franklin
TAYLOR
Atkinson, William B., Campbellsville
Hall, Michael M., Campbellsville
Lewis, Gerald C., Mannsville

TRIGG
Futrell, John, Cadiz
UNION
Heasty, Robert G., Morganfield
WARREN
Carson, William O., Bowling Green
Davis, Joseph, Smiths Grove
Funk, Jesse T., Bowling Green
Gilbert, James T., Bowling Green
McCormack, William R., Bowling Green
Toomey, Lawrence O., Bowling Green
Wells, George M., Bowling Green
WASHINGTON
McCammon, Walter O., Springfield
McIlvoy, Jr., Daniel B., Springfield
WAYNE
Duncan, Frank L., Monticello
WHITLEY
Brown, Leonidas X., Williamsburg
Smith, Keith P., Corbin
Walker, Jehu C., Packard

ORIGINAL ARTICLES

BENIGN TUMORS OF THE STOMACH

STANLEY T. SIMMONS, M. D.
FOSTER D. COLEMAN, M. D.
Louisville

Benign tumors of the stomach of clinical importance are of infrequent occurrence but are sufficiently common to warrant attention. In recent years an extensive literature has accumulated on their incidence, pathological and clinical features, and roentgen diagnosis. The question may well be asked, are these tumors of the stomach occurring more frequently or with modern methods of diagnosis, are we recognizing more of them? We believe the latter to be the case. It is the purpose of this paper to give a brief review of the literature and present a case of neurofibroma of the stomach that recently came under our observation.

Benign tumors may arise from any one of the several coats of the stomach: mucosa, submucosa, muscularis, or serosa. According to the tissue of origin, they may be divided into two groups: epithelial and mesenchymal. The epithelial group includes adenomas, adenopapillomas, adenomyomas, and fibroadenomas. The mesenchymal tumors are the leiomyomas, fibromas, lipomas, neurofibromas, and the very rare angiomas and osteomas. Finally, there is a group of lesions not truly neoplastic but usually included with tumors. These include cysts, simple blood or lymph cysts, dermoid and echinococcus cysts, and rarely embryonic rests of the pancreas.

Read before the Jefferson County Medical Society.

It is difficult to ascertain the incidence of these tumors. In a review of the literature we have found quite a variation in the figures quoted by different authors. Eustermann states in Portis' Diseases of the Digestive System that a little more than 1500 benign tumors of the stomach have been reported to the present time. In 1922 Eustermann and Sentry reported 27 cases observed at the Mayo Clinic in 20 years in which the diagnosis was verified at operation. In the same period, 2,168 malignant tumors were found at operation. The benign tumors were, therefore, 1.23% of all gastric tumors found at operation. Clinical diagnosis of carcinoma of the stomach was made in 2,285 additional cases during the same period. The number of benign tumors observed at the Clinic was, therefore, .6% of the total number of cases diagnosed clinically and by operation as tumor of the stomach. In 1929 Stewart found an incidence of .43% in 11,000 autopsies. In 1930 Hillstrom of the University of Minnesota found about 5% of all gastric tumors discovered at autopsy or operation were benign. This, it would seem, is quite a high incidence for benign tumors. Kirklin & Weber reporting on a large series of cases in which careful roentgen examination was done, stated that less than 2% coming under observation were benign. To the present time 176 cases have been reported from the Mayo Clinic. Root reports that based on autopsy, surgical and roentgen findings, only 17 benign tumors of the stomach have been found in 250,000 admission records at the Cleveland Clinic. Of this group 12 have been definitely proved benign by pathological examination at autopsy or surgical operation. Three of these cases were found to be neurofibromas and three leiomyomas. Shallow and Lemmon have reported 13 cases in a review of 300,000 admissions to the Jefferson Hospital, Philadelphia, in a period from 1909 to 1939. Eleven of these cases had a histological diagnosis, only one of which was neurofibroma. Mimes & Geschickter in 1936 reviewed 931 benign tumors of the stomach and reported 50 cases of their own from Johns Hopkins Hospital. Only one neurofibroma was found in their series. Dudley, Miscall & Morse recently reported 76 microscopically examined benign gastric tumors from 21,026 post mortem examinations for all

causes of death at Bellevue Hospital in a period of 23 years. At the same time they reported 32 benign tumors of the stomach discovered at operation in a period of ten years in the same hospital. Not a single neurofibroma was discovered in the complete series.

The symptomatology of benign gastric tumors is variable and often indefinite. The symptoms depend on the size, location, and the presence or absence of associated ulceration. The most common complaint of these individuals is ulcer-like distress often relieved by ulcer management and the true cause not discovered unless a thorough examination is made. The past history does not reveal the periodicity, progression and other common attributes of ulcer or carcinoma. The second most common complaint is hemorrhage. Eustermann states that the incidence of hemorrhage seems relatively greater in cases of benign gastric tumor than in cases of peptic ulcer. It resembles the massive bleeding of ulcer more often than the slow weeping of carcinoma. In some of the series reported in the literature the incidence of hemorrhage was 40%. The subjective symptoms associated with severe hemorrhage are often the only presenting complaint emphasizing again the rationale of excluding the gastro-intestinal tract as a source of trouble in all cases of severe anemia. Such severe exsanguination occurs most generally with mucous polyps and more with the pedunculated than sessile tumors. In about 10% of the cases pyloric obstruction may be the predominant symptom. The obstruction may be progressive or intermittent in character depending on the location and type of tumor. Smaller tumors not associated with ulceration and located in the body of the stomach are usually asymptomatic and discovered only by the surgeon or pathologist.

These facts are well illustrated in the report of Dudley, Miscall and Morse to which I have already made reference. In 60 of the 76 autopsied cases which they reported a complete clinical diagnosis had been made. Not one was diagnosed correctly before death. Forty-two of the 60 cases were quiescent and asymptomatic. Complete examination including x-rays, produced no positive indications of gastric disease. It is, therefore, evident that benign gastric tumors may remain asymptomatic for years without detriment to the individual. In the other 18 cases symptoms referable to the gastro-intestinal tract were present but were atypical, vague and confusing. After complete study the symptoms, physical signs, laboratory and x-ray studies failed to agree sufficiently to indicate the gastric lesions. Benign tumors in them were not even mentioned, all being incorrectly diagnosed or missed completely. In the 32 operative benign tumors included in the same report 30% were correctly diagnosed before operation. Of the remaining 70% in which the diagnosis was incorrect, 55% were thought to be carcinoma and 15% were labeled as bleeding ulcers.

Case Report

A 52 year old engineer was seen in the office in June, 1942. He complained of pain and epigastric distress beginning three years previously. His discomfort was felt 3-4 hours after meals and was relieved by taking of food or alkalies. There had been long intervals when he was completely free of symptoms. His appetite was always good and he had gained weight. He had vomited occasionally and in a few instances had noticed night pain. For a long time he had noticed slight soreness in the upper abdomen. Bowel habit had been normal and there was no history of tarry stools. He had been a heavy smoker for years. His father and an only sister had died of cancer.

Physical examination was negative except for slight tenderness in the epigastrium.

The laboratory examination was negative except for the gastric analysis and roentgen study of the stomach. The urine had a specific gravity of 1.020 and was negative for sugar and albumen. The blood examination was as follows: 4,330,000 red cells; 90% hemoglobin; 6,650 white cells with a normal differential count. The Kahn test was negative. The gastric analysis showed a total acidity of 5 degrees and no free hydrochloric acid. After histamine stimulation the total acidity was 12.5 degrees and no free hydrochloric acid. Roentgen examination showed the presence of a large subtraction defect involving the body of the stomach. This area was quite irregular and extended from the cardia downward to the pyloric area. The normal mucosal pattern was obliterated and no peristalsis was observed passing over this area. The duodenal bulb was normal. Consent for gastroscopic examination was refused.

Interpretation of the x-ray findings was

difficult. We felt the gastric defect was not characteristic of any of the usual types we see. After some thought we felt we were justified in saying an intragastric lesion existed—most likely a carcinoma—though other possibilities were entertained. Surgery was advised.

Subtotal gastrectomy was done by Dr. Irvin Abell under spinal anesthesia supplemented by sodium pentothal. The postoperative course was stormy. Immediately he developed a hacking cough and moist rales were present in the chest. Response to sedation and atropine was prompt. The sutures were removed on the 9th post-operative day. The next morning the patient gave a violent cough and all layers of the incision opened. The omentum, and at one point the colon, protruded through it. Inspection of the wound showed no evidence of infection. Secondary closure was done immediately. Patient's condition became critical, cough, dyspnea, and rales in chest. In the course of a few hours there was definite evidence of consolidation in the lower lobe of the left lung and we felt that either pneumonia or atalectasis was present. Bedside chest plate confirmed the diagnosis of atalectasis. Hiccough was present for two days. Patient was treated with sulfathiazole, sedation, intravenous glucose and oxygen. He made slight improvement but after a few days it was felt that bronchoscopic drainage was indicated and Dr. Maurice Buckles was asked to see the patient. He removed a large amount of pus from the left lower lobe bronchus. Patient's improvement was spectacular from then on and he was discharged from the hospital on the 25th post-operative day.

He has been followed in the office from time to time. X-ray studies reveal the gastro-jejunostomy is functioning perfectly. He feels well and is doing the same work he did before operation.

Pathological Report

Gross: Resected portion of stomach shows an intragastric tumor lying between the mucosa and serosa measuring 70x60x40 mm. Cut surface is white and smooth. The central part appears some what cystic.

Microscopic Study: Tumor is composed of oval spindle shaped cells. There is a moderate amount of fibrillar structure. Some areas suggest rosette formation but these areas are indefinite. The tumor is encapsulated.

Diagnosis: Benign neurofibroma.

Summary

Benign gastric tumors relatively uncommon clinically, frequently escape diagnosis during life. The great majority probably remain asymptomatic and without detriment to the individual. They may, however, produce alarming symptoms, hemorrhage, ulceration, and obstruction, the complexity of which often leads to errors in diagnosis. Practically all these mistakes can be traced to confusion with either gastric carcinoma or bleeding peptic ulcer.

A fairly characteristic x-ray appearance which has been illustrated may be present. A final diagnosis of benign tumor is impossible by any other means than histological examination.

DISCUSSION

Sydney E. Johnson: Benign tumors of the stomach should probably be considered with the larger group of new growths usually designated submucosal or intramural tumors, although not all of these rather infrequently seen growths are submucosal. In some cases the roentgenologist may make a correct pathological diagnosis. More frequently he will have to content himself with a non-specified report of submucosal tumor. However, differentiation of these tumors from cancer and benign ulcer is a worthwhile undertaking.

It seems likely that no one radiologist has seen a sufficient number of benign tumors of the stomach to establish reliable diagnostic criteria, but from the reports of cases by individual workers, the following characteristics appear to be of greater diagnostic value.

(1) Smooth, sharply circumscribed mass, often centrally placed, (2) Usually no significant change in motor activity, (3) No loss of mobility of the stomach, (4) Absence of spasm, (5) Mucosal pattern altered only by pressure of growth, (6) Deep ulcer frequently seen in center of large sarcomata and leiomyomata.

The most constant clinical finding reported is hemorrhage.

Dr. Coleman's films show, in this case, a very large, smooth, sharply circumscribed tumor. There is no indication of ulcer, but the mucosal pattern is normal to the borders of the tumor. Drs. Coleman and Simmons rightly suspected a non-carcinomatous tumor, and, I think, rightly refrained from attempting a specific diagnosis, leaving that to the proper sphere of the pathologist.

Harry M. Weeter: In making a microscopic diagnosis of these benign gastric tumors one must distinguish between a leiomyoma of smooth muscle origin, a fibroma, and a neurofibroma. Connective tissue strains are helpful to distinguish between the first two types.

Arrangement of the cells in rosettes is accepted as evidence that the tumor is derived from nerve supply. The case under discussion seemed to fit best in the third type.

ADDRESS TO THE HOUSE OF DELEGATES—AMERICAN MEDICAL ASSOCIATION

Brigadier General Fred W. Rankin
Chief Consulting Surgeon, U. S. Army
President, American Medical Association
Washington, D. C.

The realization that I am about to relinquish the office of President of this Association prompts me to pass in review our record, crammed with exciting events, and to scan the horizon anxiously for gathering storms which may imperil our course and test further our courage and endurance. That we have kept a steady course set toward the maintenance of the health of the Nation and its Armed Forces, during these turbulent times of world-wide hostilities, despite hurried preparation, bespeaks our Association's self-sacrificing devotion to duty, and emphasizes its indomitable spirit and resolute determination, characteristics distinctly American. Never during its history, or for that matter, during the history of our country, has there been the urgent demand which current exigencies have imposed upon our special talents and skills. The rapid, thorough, and efficient manner by which these demands were met has been due in great measure to the astute foresight of our leaders, who, long before that fateful day when our enemies treacherously launched us into this holocaust, began careful preparations for the inevitable requirements which develop, as a consequence of the military, industrial, and continuing civilian needs for adequate medical care. That these plans were well contrived and intelligently executed, is forcefully demonstrated by the continued improvement in the health of our Nation and our Armed Forces, despite the fact that about forty percent of the usable medical personnel of the country has entered the Services, and the added burden of a parallel gigantic industrial expansion that has been placed upon the thinned ranks of the remaining civilian physicians. My deep gratification in reporting this thrilling and inspiring performance is heightened only by my humble respect and intense appreciation for the high honor you so generously bestowed upon me as your President in this trying period, and for the distinct privilege in participating in these activities and in associating with the scrupulously sincere, assiduously attentive, and particularly competent members of the Board of Trustees and the Executive Staff of this Association.

During the past year our country has been feverishly engaged in mobilizing and preparing its industries and manpower for war on a scale unprecedented in its history. All efforts have been directed toward a single fundamental purpose—the creation and preparation, as rapidly as possible, of a formidable military machine with irresistable striking power. This has required a national metamorphosis in which the medical profession has participated eagerly and wholeheartedly. Indeed, no other group has shouldered its responsibilities in this emergency with greater self abnegation, more cheerful enthusiasm, and more efficient adaptability. Upon us devolved the obligation of establishing a bulwark against epidemic disease and military casualties, both on the home front and on the farflung battlefields of this globe-encompassing war. Essentially our function is concerned with the conservation and maintenance of health. That we have performed this function successfully is demonstrated by the fact that we have given our civilian workers production superiority in the rapidly expanding war-geared industries, and our Armed Forces combatant superiority in the jungles of Guadalcanal, on the gale-swept North Atlantic, and on the blistering deserts of North Africa.

The most difficult and exigent phase of the war, i.e., rapid mobilization, has been expeditiously concluded. Now, our paramount problems are concerned with logistics; production has been achieved. Consideration is already being given postwar planning even though it may seem little warranted at this time. It should be realized however, that only by such long range charting can the confusion and disorder which characterize immediate postwar reconstruction periods be averted. The manifold problems arising from these future developments will deeply concern and intimately affect us all. A rational solution of these problems depends upon their thorough comprehension; but first, they must be sighted as distinctly and as

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clearly as possible. Accordingly, we set a watchful gaze upon the horizon.

It must now be apparent, even to those who have been most purblindly recalcitrant, that mighty influences are at work to effect epochal changes in the complexion of medical practice. While it would appear that these influences have suddenly loomed on the medical scene, it should be realized that they have long been forming, and that the present military conflict has merely hurried their development, and magnified their significance. That they can no longer be ignored seems difficult to controvert. We must face realistically these tremendously forceful socio-economic trends which are intimately involved and deeply concerned with the Nation's medical problem. The directional signposts of post-war planning may now be clearly read by proposals already made for broadening the social security program and extending the Nation's economic resources to assure "adequate medical and health care for all, regardless of place of residence or income status." The complex connotations and inevitable implications of these plans and proposals make it quite apparent that the old system of medical practice will be considerably modified. If the limitless and baneful potentialities that can be projected into the science and art of the future of medicine are to be averted, it becomes imperative in this transition period that the wise and tempered counsel of the medical profession exerts its proper influence. That our medical descendants should look back and point a culpable finger to our page of history which would read that our actions were "too little and too late," is a plaguing thought. Our responsibility in approaching and participating in these evolutionary processes is greater than many of us have been willing to admit, indeed, it is intimately involved with the medical security of our country as well as our profession. Have we so long basked in the luxuriating rays of medicine as the apotheosis of professions that we have become languid and inelastic in our attitude and hesitant and fearful in our response to existing socio-economic developments? I sincerely hope not.

Our motives are inherently sincere. They are based upon desiderata to which we have held tenaciously, and which we must guard assiduously lest future progress toward higher standards in medicine and professional tenets be jeopardized. Our ultimate objectives consist essentially in the provision of the best possible preventive measures against disease, the institution of the best possible forms of therapy, and the ceaseless pursuit of advances and improvements in technical procedures and other prophylactic and therapeutic measures for clinical application. It requires no percipient degree of rationalization to realize that the complete fulfillment of these objectives for the entire nation would necessitate the development of a comprehensive medical service.

It is becoming increasingly apparent that the trends now gathering momentum are directed toward some form of national health service as an integral function of the state. Proposals of this nature—by governmental post-war planning agencies, both here and abroad, have been the subject of deep consideration, wide editorial comment, and cogent discussion. This mood has been further reflected in recent comments by various medical and non-medical writers who have penetrated with incisive clarity to the very heart of this controversial subject. It has been stated by some that the financing of this type of medical service is a socio-economic consideration, and not a medical problem. While it may be argued that financial provision for the institution of such a service is a function of the commonwealth, I am impelled to emphasize the fact that the structural character of the organization of any such type of health service is tremendously important to doctors and is vitally concerned with the execution of their professional function. This entire subject must be brought into sharp focus by the light of trenchant and dispassionate thought in order to observe both the desirable, as well as the possible apprehensive aspects of the contemplated proposals.

In the national fulfillment of our altruistic objectives, it must be recognized that two essential provisions are required, namely, professional and financial facilities. It must also be recognized that the successful attainment of these objectives cannot be accomplished if in the implementation of any plan or proposal the professional facilities are subjugated to the authoritative management, traditionally dictated by political whimsy, of some legislative council controlling the financial provisions. These two provisions are interdependent and cannot be distinctly

separated in approaching our objectives. The successful application of the former requires certain facilities supplied by the latter which, in turn, can be guided intelligently only by professional knowledge. These vastly significant facts must be sincerely appreciated by all parties, both medical and non-medical, concerned with this problem in their approach to its solution.

It is necessary to realize that the establishment of one of these contemplated medical services does not sound the death knell of private practice of medicine. These two forms of medical service are not incompatible, and their consideration must not be regarded in the light of apostasy, but rather in the light of realism. They become incompatible only if in attempting their admixture certain undesirable ingredients are added. The problem is too difficult, the time is too short, and the stakes are too high for all concerned, to allow these factors to influence our actions. All efforts must be harmoniously combined and closely coordinated toward the elaboration of an intelligent program which will permit a democratic as well as a comprehensive medical service with equally high professional and ethical standards.

It should be clearly understood that this embraces the concept of existing freedom of thought and action in the exercise of our profession and our scientific pursuits. None is more keenly aware, none more fully cognizant than I, of the resultant stultification of the science and art of medicine which would be occasioned by any loss or curtailment of this freedom. Here is a principle which is more than an heritage—indeed, it forms the supporting foundation of the art of medicine, and the guiding light of the science of medicine. It was freedom to think and freedom to express thought in speech and in writing unhampered by the fearful consequences of traditional or legislative authority that permitted medicine to progress to its present exalted position in the field of science, and it is absolutely essential in its continued advancement. It is a principle, therefore, which we can never relinquish.

Since the challenges now confronting medicine will undoubtedly be multiplied as we approach the termination of this conflict and the commencement of the difficult reconstruction period, it becomes our responsibility and duty, with ever mounting importance and increasing urgency, to prepare to meet them now. In addition to the problems concerned with medical practice, we must be ready to meet the related problems of post-war rehabilitation of physicians—physicians whose entry into Service involved personal sacrifices and the revamping of plans and ambitions, and whose return to civilian pursuits will necessitate numerous and variable readjustments, and even resumption of specialized training.

These are prodigious tasks with manifold ramifications, and far-reaching significance, but tasks which we must face with unflinching resolve. Their achievement will demand not only sincerity of interest, integration of effort, and clarity of thought, but also active and close collaboration with appropriate governmental agencies. We can no longer evade, or disregard, the growing interest of the public, the government, and various lay groups in the administration of medical care; nor can we afford to engage in a struggle for domination. The solution to these problems and the attainment of our objectives do not lie in that direction. They can be approached more expeditiously by a willingness to share their responsibilities and a readiness to cooperate in their consideration. The importance and urgency of these various problems commend the immediate establishment by this Association of suitable agencies for their investigation. In the institution of these agencies the purpose and vast significance of their function, the sharp delineation of their problems, and the need for their collaboration with others should be emphasized. They must also be impressed with the importance of these studies and their resultant proposals upon which so much depends. Indeed, the plan of action which we institute, the attitude which we manifest, and the intelligence, zeal, and judgment, which we employ now in our efforts to solve these problems will greatly influence and actually determine the future standards of the medical service of our country and the cultural standards of our profession.

Polio—A special unit to study exactly what happens in the human body when the disease strikes and the methods of treating it has been organized at the University of Minnesota, Minneapolis, with the support of the National Foundation for Infantile Paralysis. A five-year grant of $175,000 has been made. The unit will be under the general direction of a committee composed of members of the Departments of Physiology, Neuropsychiatry and Pediatrics of the University Medical School.

SOME OBSTETRIC AND GYNECOLOGIC OBSERVATIONS

T. A. Griffith, M. D.
Mt. Vernon

A great physician once said, as he delivered his Presidential address to the Southern Medical: "I could not have hoped to find myself more in the exact environment of my childhood, if I had sung, 'Backward, turn backward, O time, in thy flight, make me a child again for tonight.'" As I look back over my few hundred obstetrical cases tonight, as a beginner, cases that have not been without headaches to us and sympathies for the anxious fathers and suffering mothers of unattended cases, I feel deeply impressed. Obstetrics has progressed with civilization. For centuries woman has suffered the pangs of labor and even with modern analgesic and anesthetic agents, far too many cases become exhausted, develop uterine inertia, hemorrhage or disappointment. With ever-increasing and intensifying global war, obstetrics will continue and criticism for the profession will grow, so that socialized medicine may continue to threaten and becloud the skies again and again.

There has been more criticism about unattended labor cases than about old "Doc, so and so" himself being rich. Twenty-five years ago, we had many more doctors in rural areas than before Pearl Harbor. Remaining in training centers and specializing is good for the doctor but bad for the rural patients. Frankly, too, our local philanthropists and socioeconomists have been too late with too little and have not been interested in the real community projects, such as a small hospital, better roads and the development of resources.

A survey of obstetrics in Rockcastle County for a five year period, revealed over 2275 home deliveries with a maternal mortality comparable to most clinics. The percentage of midwife deliveries was 50-75%. For 1942, there were 500 deliveries with one maternal death. The midwife incidence was quite high and the hospital deliveries confined to the very small percentage who can pay $100.00 to $125.00 for a baby case.

With proper prenatal care, there will be practically no maternal mortality. Prenatal visits should be regular and attention should be given to syphilis, teeth, anemias, intestinal parasites in some sections, blood pressure, urinalysis, weight, edema, thyroid disturbance, avitaminoses, tuberculosis, heart and kidney diseases, the latter three requiring therapeutic abortion.

Most all of my postpartum hemorrhages have been due to pre-existing anemias, possibly associated with "K" deficiency. Nevertheless, "K", either natural or synthetic, should be given before labor, or even by injection before delivery after the onset of labor. Especially is Vitamin K indicated where undue trauma to the head is expected. Local application of Vitamin K has recently been suggested for the baby.

Newspaper articles and radio talks about prenatal care and its importance is suggested as a newer method. Gain in weight during pregnancy should not exceed 20 pounds. A person who is 20 pounds overweight at the beginning, should not be allowed to gain. The overweight person who develops edema and eclampsia has less chance to survive. In toxemias, the blood pressure rises before kidney damage occurs, and a blood pressure above systolic 170 for any length of time usually means chronic nephritis after delivery. Urinary sugar (excluding lactosuria) appearing at 5 or 6 months, may indicate pre-eclampsia later and not diabetes mellitus at this examination. Eclampsia may not develop suddenly in each case and may be prevented if one is observing the blood pressure, urine, edema; and symptoms of dizziness, headaches, visual disturbances, liver damage, or epigastric distress. Patients with breech presentation may have pain in the costal regions due to the malposition.

Obstetrical specialists are insisting on the conservative treatment of eclampsia with 10-25% glucose, the percentage depending on the amount of edema present, either perorally or intravenously, C. N. S. depressants, (but no chloroform,) salt and protein restriction, castor oil for induction of labor (or bougies and bags) if the patient does not begin labor spontaneously after a few hours. Caeserian section is performed for other coexisting indications and rarely for eclampsia.

Bleeding during pregnancy is always abnormal and during non-pregnant states, vaginal bleeding is in my experience due to organic disease, and sometimes serious, rather than functional causes.

The causes of bleeding during the first trimester are abortions and ectopic preg-

Read before the Rockcastle County Medical Society.

nancy. These two causes must be carefully differentiated because abortions can be treated conservatively, whereas, tubal pregnancy (ruptured) may bleed out fast. Infected abortions should not be curetted but serious hemorrhages due to incomplete abortions necessitate interference. Infected and incomplete abortions should not be examined after the diagnosis is made. The prevention of abortion and the preservation of pregnancy by Vitamin E, thyroid extract, and progesterone offer an interesting study. The same combination is used in sterile females if organic disease in the male and female as a cause is carefully excluded. The antisterility Vitamin E is enhanced by the simultaneous administration of B complex. E should not be given if bleeding has already occurred in threatened abortions. The dose of progesterone should be increased during the scheduled menses.

During the middle trimester, bleeding is associated with the causes of the 1st and 3rd trimester and hydatidiform mole. Other infrequent causes of bleeding during pregnancy are polyps, cervical erosions, chorion epitheliomas, and carcinoma of the cervix.

Painless bleeding during the last trimester is due to placenta previa while premature separation of a normally implanted or low lying placenta may cause a painful firm uterus and there may or may not be external bleeding. These cases are serious and are best handled in a hospital if the patient is able to be taken there. The use of a vaginal pack except in severe hemorrhage and shock is not advised. There is also a tendency to treat these cases conservatively, as in eclampsia, without Caeserian section, unless there is a long, firm and partially dilated cervix, or a centralis, which are sectioned. One of our physicians delivered a case of centralis in the home without losing the mother recently. Caeserian section continues to carry an appreciable mortality due to hemorrhage and infection.

If carcinoma of the cervix is occasionally found during pregnancy early treatment by radium, as in the non-pregnant, by a competent radiologist is indicated. Cervical and vaginal hyperplastic (condylomatous) lesions which appear at about 3 months and cause vaginal discharge with irritation may be confused with carcinoma. The cause of such condition may be due to the "hormone plethera" or deficiency in cod liver oil vitamins. A competent pathological examination of the tissues is necessary. This condition is not a frequent cause of leukorrhea as are mycotic or trichomonas vaginitis.

It is my firm conviction that cancer will become less if the chronically infected and tortuous cervical glands are destroyed or treated either by surgical removal, electro-coagulation, actual cautery, or in about ten per cent of the resistant cases with 10% argyrol tampons carefully placed within the cervical canal and retained for 12 hours. Icthyol-glycerinated tampons have no place in the treatment of chronic endocervicitis, nor do antiseptic douches cure. When the female patient needs a douche, she needs a doctor. A watery or thick discharge may be due to cancer. Every female patient should have pelvic examinations and if suspected cervical areas are noted by Schiller's test, a biopsy is absolutely indicated. There is no age limit since I have seen a very severe cancer of the cervix in a very young mother. Every family doctor has seen the pitifully thin woman with cancer which had a painless beginning with a painful end, who thought that she was having the "change." Irregular periods, brought on by slight trauma, as intercourse; or after walking upstairs quickly; after a heavy washing—these are danger signs, red lights which if not heeded will lead to a terrible end.

The carcinogenetic activities of the estrogens and the demonstration of deficient biotin (B complex factor) in cancer cells may lead to the discovery of the cause and more frequent cures for cancer in the highly progressive and educational post-war period. Diethylstillbestrol in large doses has recently been shown to relieve metastatic carcinoma of the prostate.

In conclusion, it is desired to say the following in general and to describe one gynecologic case in particular:

Incomplete abortions with alarming bleeding should be curetted. If interference is indicated in infected abortions, the ovum forceps or gloved finger should be used.

Morphine is contraindicated in threatened abortions. The drug relieves pain well enough but it may increase the strength and duration of uterine contractions. For this reason, it is an ideal drug in labor where delivery is not anticipated for two and one half hours or longer.

We now have a patient who fifteen years ago was known to have a nodular

uterus. Today, if she is living, she has what everybody has seen, bilateral extensive edema of legs extending up onto the body, masses in left side of neck, liver involvement, ulcerating area in the thigh from biopsy of involved gland, extension and metastasis to various organs and bones. It is well to mention that bony metastasis does not usually occur below the knee or elbow. Fibroids occasionally become malignant. Primary carcinoma of the ovary or fallopian tube cannot be ruled out since the biopsy was indecisive. Carcinoma of the thyroid is a possibility but neither of the above are as likely as malignant fibromyoma.

My experience has not been long, nevertheless, as Henry Brooks Adams once said, "All experience is an arch to build upon."

SCHIZOPHRENIC AND ORGANIC REACTION TYPE OF PSYCHOSES

ISHAM KIMBELL, M. D.
Superintendent, Central State Hospital
Lakeland

A number of years ago we observed that in dealing with psychosis of the organic reaction types that there is a too prevalent tendency to close those cases and forget them entirely after we have established to our complete satisfaction the etiological factor in the organic deficit and outlined the characteristic symptomatology of the psychosis.

When we were able to occasionally demonstrate to our satisfaction that the abnormal mental mechanisms in the individual psychotic were largely an exaggeration of his personality traits prior to the development of the psychosis, we were inclined to the opinion that we had approached an understanding of our patient from the psychiatric point of view. Following these observations we had the opportunity to study schizophrenics who contracted syphilis and who developed paresis with the characteristic symptoms of this organic reaction type and who, when their organic psychosis was adequately treated resulting in a remission, reverted later to the schizophrenic reaction type.

It has been stated by one of our most eminent psychiatrists that there is much to be learned "towards our ultimate more complete understanding of schizophrenia in the study of the pathological processes of any other disease entity in which the pathology is determinable and which has any symptoms comparable to schizophrenia."

In our considerations of these two disease conditions, schizophrenia and organic brain disease, we must consider causative and precipitating factors.

Constitution, whether hereditary or not, has been given much attention in psychiatric literature as the all important factor in dementia precox. It is known that personality alteration is very profound in schizophrenia and that the schizophrenic state is not emotional in origin. In paresis recognition of the exact etiological factor in the production of the organic disease condition is definite and beyond dispute. There has been much discussion as to whether or not a pre-existing pathological condition may be set off or become increased by trauma to the extent that a psychosis is precipitated. It is also questionable as to whether or not trauma or any other external factor may precipitate schizophrenia. It has not been proven definitely or conclusively that dementia precox is caused or increased by stress, strain or excitement in unusual environments but on the other hand it is known to proceed independently of abnormal situations, even though the psychosis may be coincidental with the stress, strain or excitement.

The question as to what type of reaction may be expected when an organic disease of the brain occurs coincidentally with an endogenous psychosis may seem unimportant, but since we have seen both conditions in the same individual our attention was directed toward the consideration of the problem as to whether or not we should be able to learn anything of importance by a study of the individual who is afflicted coincidentally with these two conditions which have no etiological or histo-pathological relationship.

We admit the power of purely mental or psychic influences to effect organic and psychological changes in animals and human beings but it is not quite conceivable that schizophrenia could have been a precipitating factor in what were described in our cases as characteristic mental symptoms of paresis. Neither can we conclude that the rapid disappearance of prominent neurological symptoms and the complete serological remission were in any way influenced by the primary schizophrenic state.

Read before the Jefferson County Medical Society, June 21, 1943 at Lakeland.

These considerations appear to lead us nowhere except to the realization of the fact that "the most outstanding need to be felt in our research work is the systematization and clear formulation of our therapeutic problems and hence a more complete type of study of our clinical material."

The mental changes or schizoid reactions which have been described as due to infection, toxins, exhaustion and other somatic disorders, as well as acute or chronic psychic trauma, have been subdivided into various types representing the somato-psychogenic group, in which the somatic as well as psychic factors are brought very prominently into play.

Is it reasonable to conclude that the so-called "schizophrenic form of general paresis" is a schizophrenic reaction allied or somewhat similar to the Popper-Kahn "schizophrenic or schizoid reaction?"

It was the opinion of Bela Hechst that the mild histologic changes found in the "schizophrenic type of general paresis" have no functional significance due to some extent to the mildness of the process in the cortex as well as to the fact that the sub-cortical ganglia are not involved.

We must and did consider since our cases were ex-soldiers, the question as to whether or not our patients developed a schizoid reaction from some psychic trauma incident to induction into the military service and which was further aggravated by somatic disease and in some instances trauma from repeated surgical interference. They developed syphilis manifested by a primary sore, secondary lesions and positive serology, which later developed into an organic reaction type psychosis with acute episodes, but it is not thought that we have evidence to demonstrate that, this, in our cases finally culminated in the "schizophrenic form of general paresis."

It is very true that many individuals who suffer from severe infections and exhaustive diseases never develop a psychosis and that chronic luetic infection does not always result in an organic reaction type psychosis.

A careful study of the "life facts" of such individuals, their life histories and personality traits, is of vital importance.

We have in our hospitals paretics with schizoid reactions which seem to be part and parcel of the organic reaction type of psychosis and which apparently belong somewhere in that somato-psychogenic group described by M. Serejaki, but our schizophrenic patients who developed paresis had symptoms characteristic of paresis and when they were treated, with resulting improvement, manifested by a complete neurological and serological remission, reverted to the characteristics of the primary schizophrenic psychosis.

We have seen in the same individuals two diametrically opposite forms of response in which the contrast between the two reaction types is very distinctive.

These two reaction types in the same individual are probably not rigid, unrelated entities, even though the organic reaction type was produced by a specific cause.

A correct understanding of the manner of development of these reaction types would assist us to avoid danger points in the management and treatment of the mentally sick as well as open up for us a most fertile field of prevention.

We have been chagrined at times to discover after further observation that some of our dementia precox patients who had apparently recovered from their psychosis had an alcoholic background which accounted in toto for the schizoid reaction. Brain tumor has been infrequently found at autopsy after the patient had had a long residence in an institution for the treatment of dementia precox. The writer has seen two such autopsies, in which the psychotic manifestations, according to records in these cases, were, at first described as outstandingly characteristic of the schizophrenic type of reaction. Were the brain tumors and the schizophrenia merely coincidental in these individuals? We should be able to answer this question with some degree of accuracy. In such cases we have splendid opportunity for study of the organic associated with the inorganic, the sum total of obvious factors and the individuals' reactions.

If we are to expedite the acquisition of a more abundant knowledge and make it applicable to the needs of psychiatry our efforts must be directed toward a more complete understanding of the personality function in toto of those psychotic individuals with organic deficits as well as in the schizophrenic reaction type psychoses. Our neuro-pathological studies after death are unquestionably vital to success, but we must organize, direct and correlate these data with our psychological, psychiatric, clinical and neurological investigations on the same individual.

A REPORT OF EIGHTY CASES OF MENINGITIS FROM THE MEDICAL SERVICE OF STATION HOSPITAL, NASHVILLE ARMY AIR CENTER, NASHVILLE, TENNESSEE

A. Clayton McCarty, Major, M. C.
Chief of Medical Service
and
Gerald L. Infield, 1st Lt., M. C.
Nashville, Tenn.

This report covers a series of eighty cases of meningococcic and streptococcic meningitis, with one fatality, covering the period from January 1st, 1943 to June 1st, 1943. We have accepted for this series all patients from whose blood or spinal fluid, positive meningococcic or streptococcic cultures were obtained. No effort was made to type the infecting organism, mainly because we did not feel that the type of organism would have any bearing on the treatment to be instituted.

From our experience with the first few cases, it became apparent that early diagnosis with early adequate treatment was imperative and that if we were to wait for definite neurological symptoms to develop before instituting treatment, an adverse mortality rate was inevitable. In fact, the one death we encountered was the second patient in this series. This patient was admitted from a troop train one night with 34 other men, all of whom appeared to have ordinary upper respiratory infections. Each of these men was seen by two medical officers and the patient with meningitis did not appear to be any more acutely ill than the majority of the others. However, by the following morning, this patient was unconscious and died five days later.

So that early cases would not escape detection, we then set up the following working rule for diagnosis which proved to be very satisfactory. It was decided that any patient admitted with the following symptoms (1) headache, (2) rigidity or soreness of the neck on either lateral or forward motion, (3) nausea or vomiting, and (4) a white blood count of 10,000 or over, should have a lumbar puncture. The laboratory examination of the spinal fluid consisted of the following: (1) Smear. (2) Culture. (3) Cell count. (4) Sugar content.

As our number of cases increased, we noticed that some patients with petechia had for the first few hours almost no other symptoms. A lumbar puncture was immediately done on these cases.

All cases who received a lumbar puncture were immediately started on sulfa therapy regardless of negative laboratory findings of the spinal fluid as far as appearance, pressure, cell count and smear. All of the fluids were cultured on a triptose phosphate media which seemed to be far superior to other culture media in producing early and abundant colonies of organisms. In a majority of the positive cases identification was possible in 12 hours.

Following the above rule for lumbar punctures, it is true that a considerable number of patients received punctures who did not have meningitis. Our ratio of punctures to positive cases was approximately 2 to 1. However, as far as we know, no cases of meningitis were missed and we were so impressed with the value of early treatment that we would rather puncture ten patients who later proved to be negative, than get a late start with one case.

Some of our readers may question the advisability of starting patients on large doses of sulfadiazine when the spinal fluid has a normal appearance, cell count, and sugar content. However, if we realize that meningitis starts as a septicemia of varying duration before the meningeal invasion occurs and if one has seen, as we did in several cases, patients with a normal cell count become unconscious in three or four hours, our feeling in this matter can be appreciated.

Therapy: While our series consisted of both meningococcic and streptococcic meningitis there was no differentiation made in regard to treatment except for the omission of meningococcic antitoxin in the streptococcic cases.

It was felt that sulfadiazine was the drug of choice and this was used in all cases. As soon as it was decided to do a lumbar puncture, 4 grams of sulfadiazine were given by mouth if possible, followed by 4 ounces of water containing two teaspoonfuls of baking soda. Treatment was continued with 2 grams of sulfadiazine plus 10 grains of soda bicarbonate every 4 hours until a sulfa level of between 15 to 20 mg. per 100 cc. of blood was obtained unless patient's symptoms, white blood count and temperature became normal before this level was reached. The drug was continued until two days after symptoms, temperature and blood count became normal. The average length of treatment was 6 days with the average amount of drug given being 54 grams.

In cases with vomiting or unconsciousness the intravenous route was employed

using the sodium salt in sterile water (5% solution). An initial dose of 5 to 10 grams was given depending on the size of the patient and the severity of the symptoms. This was followed by 5 grams intravenously every 12 hours until a satisfactory blood level was reached or until the patient was able to receive the drug by mouth.

In cases of meningococcic meningitis who were unconscious or who appeared likely to become unconscious because of excessive drowsiness or mental sluggishness or who had petechia, meningococcic antitoxin was given intravenously in doses of 50,000 units in 200 cc. of 10% glucose every 8 to 12 hours until fully conscious. The average amount used was 150,000 units. However, one patient required 450,000 units, he being unconscious for five days. In all 16 patients received antitoxin.

Two cases gave evidence of being the acute, fulminating type of meningitis exhibiting the Waterhouse-Freiderichsen syndrome with sudden collapse, purpuric eruptions, pallor, and a falling blood pressure. A solution of 5% glucose in saline was given intravenously, as glucose and sodium chloride are advocated in cases of adrenal damage (McCance, 1936). In addition, these cases were given synthetic cortical extract (desoxycorticosterone acetate) intramuscularly (2 cc. every two hours until systolic blood pressure exceeded 100 mm. of mercury). One patient's pulse was imperceptible on admission but he fully recovered as did the other one).

In every case fluid intake and output charts were kept. Fluid intakes were maintained at about 3500 cc. to 4000 cc. and outputs at 1200 cc. to 1500 cc. Daily urinalyses, sulfa levels and white blood counts were taken.

Where sedatives were indicated, sodium luminal or sodium amytal were used with good results. We felt that the use of morphine and codeine on these patients was contraindicated because of their depressive action on respiration.

Reactions: Sulfonamide reactions were of practically no consequence in our series of patients. Patients with blood sulfa levels of 15 to 20 did not appear to have any more signs of reactions than did those of lower levels providing fluid intake and output were closely watched. However, in a few cases levels inadvertantly reached 25 mg. or higher. These cases showed more of a tendency towards reaction.

Approximately 40% of the cases developed a few sulfa crystals and a few innumerable red blood cells in the urine. In these cases the fluids were increased and no change was made in therapy. Kidney colic with symptoms of crystal formation in the kidneys or ureters developed in three cases. In these cases the drug was either discontinued or reduced in dosage depending on the patient's progress. One case of gross hematuria with severe kidney colic and anuria developed. The drug was temporarily stopped, fluids forced, and no untoward results followed.

Despite the large doses of antitoxin used, no serious serum reactions occurred. Approximately 75% of the cases developed hives of varying degrees. Most of these cases were easily controlled with adrenalin and ephedrine sulfate, along with calamine lotion locally. For the more severe cases, cold starch baths and compresses were of definite value.

Special Diagnostic Features: It was noticed that nuchal rigidity was a far more constant and earlier finding than Kernig's sign.

Headache was a very prominent finding being a very early symptom and present in over 90% of the cases. More patients described it as an expansive, throbbing type of headache which was worse on movement or when the patient assumed an upright position.

Nausea and vomiting were present in approximately a third of the cases which were diagnosed early. In those cases diagnosed later in the course of the disease, vomiting was more frequent with a tendency to become projectile in nature.

The abdominal, knee and plantar reflexes appeared to have no diagnostic significance except that some cases were noted to have abdominal reflexes absent, if bordering on unconsciousness.

Photophobia was conspicuous mainly by its absence.

Only a few of our cases presented petechia but since the majority of these became unconscious, it was looked upon as a serious sign.

Response to Therapy: While the streptococcic cases appeared more critically ill at the onset, their response to sulfadiazine seemed more rapid than did the meningococcic cases.

Antitoxin seemed to be of definite value in the more seriously ill meningococcal patients and it is our belief that when it is indicated, large doses should be employed (50,000 U - 150 cc.)

Desoxycorticosterone acetate seemed to be of definite value in cases of hemorrhage in the adrenals. Its early use is indicated along with 5% glucose-saline solution intravenously to combat toxaemia.

The one case that died, interestingly enough, showed evidence before death of the disease being well under control (normal white blood count and spinal fluid) and on postmortem examination showed no evidence of hemorrhage in the adrenals and very little exudate about the brain and meninges. It was felt that his death was due to a cardio-circulatory collapse as a result of toxaemia. We wonder what the results in this case might have been if a higher sulfa level had been obtained and if there had been a more liberal use of antitoxin, since a better response was obtained in subsequent cases who appeared to be just as ill at the onset.

The question of intrathecal therapy has been a subject of much controversy. We felt that for all practical purposes the bacteria in the spinal fluid can be discounted and consequently, there is little justification for either serotherapy or chemotherapy by the intrathecal route. It seems probable that the defense mechanism lies in the blood and tissues rather than in free spinal fluid. What is important is the state of the meninges and these can best be reached through the systemic circulation.

We also saw no need for nasal feedings or the use of the subcutaneous routes for sulfadiazine medication in patients unable to take the drug by mouth since the intravenous route is easy and efficient.

The duration of therapy is another controversial point. In our series we found that if a patient was symptom free and had a normal temperature and blood count for 48 hours, sulfa therapy could safely be discontinued. It was not necessary to restart treatment in any case. One reason for this may have been that due to our fairly high sulfa levels, the drug was present in effective amounts for several days following its discontinuance.

We believe sulfadiazine to be the drug of choice in all meningitis cases and found that in twelve hours time the spinal fluid had a sulfa level of about 15% of the blood level. We do not believe that sulfathiazole should be used, because of all the sulfa drugs, it will be present in the spinal fluid in the lowest concentration.

We feel that spinal punctures are only of value in making a diagnosis, whenever an exacerbation of the meningitis is suspected, or in rare cases to relieve severe headache during the course of the disease. Although several punctures were done on many of our patients during the course of the disease, it might be stated that the information obtained in this way was not contrary to other clinical data such as temperature, pulse rate, leucocyte count and the appearance of the patient. However, the smears obtained from the follow-up spinal punctures were interesting. Spinal fluids which at first contained a large number of extracellular organisms, would later be found to contain fewer and fewer organisms which were almost entirely intracellular. Finally the glucose content would become normal and no organisms could be detected.

Detection of Carriers and Preventive Measures: With the appearance of the first case of meningitis, all men in the same squadron as the patient (about 200) were placed on a Working Quarantine and throat smears were taken on each. The men with positive throat smears were separated from the others and given 1 gram of sulfathiazole four times daily. Almost every treated case was negative within one week. Very strict precautions were used in the spacing of beds, an effort being made to double the normal distance between beds, and general sanitation was watched closely.

In no case were we able to prove that direct contact spread the disease. No person in attendance to the patients contracted the disease. No masks were worn as we felt that the wearing of these predisposes to nasopharyngeal congestion which probably lowers the resistance of the mucous membrane. It is likely that infection of a healthy mucous membrane produces a temporary carrier state with subsequent immunity.

The incidence of the carrier rate and the number of cases was interesting. With the first case the carrier rate was found to be 10.5%. As the number of cases increased, the carrier rate increased until at the time when the number of cases was at its height, the carrier rate was 87.7%. This rate decreased as the number of cases decreased.

Summary: A series of 80 cases of meningitis is recorded; due to meningococcic and streptococcic. There was one fatality and the remaining cases recovered without complications.

The age group of our patients was from 18 to 35 which undoubtedly helps to ac-

count for our low mortality rate.

We offer a routine procedure to aid in the early diagnosis of meningitis as we feel that early diagnosis and adequate therapy will directly influence the mortality rate.

We feel that sulfadiazine is the drug of choice and that sulfa level of 15 to 20 mg. per 100 cc. of blood can be maintained with comparative safety. We are of the opinion that therapy can safely be discontinued 48 hours after the patient becomes symptom free.

We believe the use of meningococcic antitoxin is effective in the treatment of meningococcal meningitis in those cases bordering on unconsciousness or who became unconscious.

CLINICAL X-RAY CONFERENCE

HYPERNEPHROMA WITH METASTASES

Sydney E. Johnson, M. D.
Vincent Stabile, M. D.
Louisville

Case Report

The case presented offered no difficulties in diagnosis, but it is of considerable interest because of the sequence of events which led to the diagnosis.

The patient was first seen at her home on January 21. She was a rather heavy woman, 54 years of age, who was lying in bed, complaining of severe pain in the upper part of her left leg. She had just returned from Dr. Horine's office to which she had gone for a routine monthly check of a cardiac condition. As she ascended the steps of her home her leg gave way and she was carried to the bed. On examination, the left leg, just below the knee, was slightly swollen, extremely tender and painful, but not deformed. The pain and tenderness appeared to be out of proportion to any apparent injury. The patient had no other complaint of recent origin and presented no other significant physical findings. She was given morphine. The following morning, she was sent to St. Joseph Infirmary for further diagnostic study and treatment.

X-ray films were made of the right knee and upper half of the leg. Much to our surprise, instead of finding a simple fracture, the films showed a large destructive lesion in the proximal end of the tibia. The lesion was entirely osteoclastic in character and had almost completely destroyed the cortex in a section of shaft eight centimeters in length. Thin shells of cortex were displaced beyond the borders of adjacent normal bone. A remaining shell of cortex on one side showed the presence of recent fracture but there was no displacement of fragments. The lesion was reported as metastatic carcinoma, probably of renal origin. Other sites of the primary lesion would naturally be considered, but in the writer's experience all secondary tumors in the proximal end of the tibia have proven to be of renal origin.

Intravenous urography and aspiration biopsy were recommended, and carried out. A large right renal tumor was revealed by the urograms. On the aspiration biopsy Dr. Weeter reported metastatic adenocarcinoma, with cellular appearance and arrangement suggesting atypical renal tissue.

Further questioning and examination of the patient brought forth the information that she had passed blood on two occasions, eighteen and six months previous to her current experience. There had been considerable weight loss within the past year and there was found to be a large palpable mass in the upper right quadrant of the abdomen.

DISCUSSION

E. L. Shiflett: The lesion appears to be a completely destructive one of the osteolytic type. It began as a central lesion and had destroyed bone without causing expansion. It is a metastatic carcinoma. Carcinoma of the thyroid, carcinoma of the breast, and carcinoma of the kidney, are the most frequent neoplasms giving rise to this type of metastasis. This case proved to be metastatic carcinoma from a hypernephroma of the kidney.

The tendency today, particularly in the larger clinics, is to discard the term hypernephroma, believing that the vast majority of hypernephromas are microscopically adenocarcinomas of the kidney. The term "hypernephroma" is almost legendary and is here to stay, probably for all time, irregardless of whether they are hypernephroma or adenocarcinoma.

Harry M. Weeter: I do not think the term hypernephroma will be discarded completely. However, careful microscopic study of tumors formerly listed as hypernephromata has lead to a diagnosis of adenocarcinomata of the kidney. This type of tumor, therefore occurs much more frequently than was once thought.

The case illustrates very clearly the value of a careful case history extending back a

Read before the Jefferson County Medical Society.

number of years, and including points the patient might consider totally irrelevant. The patient came to Dr. Stabile complaining of a pain in her leg. X-ray revealed a bone tumor, probably metastatic, and a biopsy showed an adenocarcinoma, metastatic from the kidney. Further questioning of the patient showed that a diagnosis of kidney tumor had been made several years ago and she had refused an operation, a decision which very decidedly cost her a chance of recovery.

TUMOR OF THE LOWER LUMBAR SPINE

CHAS. WOOD, M. D.
E. L. SHIFLETT, M. D.
Louisville

CASE REPORT

This patient was referred by Dr. J. R. Stites for intravenous urography.

It is our custom to make a preliminary scout examination of the abdominal cavity and lumbar spine in the anteroposterior plane to search for other causes for backache other than abnormal urinary tract. We also observe the condition of the urinary tract when spine examinations are requested. This precaution has benefited us and patients many times as it did in the particular case.

We observed the pedicles of the fourth lumbar, particularly the right were abnormal, and associated with this was an acute but mild angulation of the lumbar spine to the left at the level of the fourth body. Intravenous urography revealed no abnormality of the urinary tract. After completing the urography, additional roentgenograms of the spine were obtained. These showed a complete absence of bone structure in the posterior third of the fourth lumbar body with some destruction of the pedicles. Partial bone destruction was present in the entire body. A similar, but smaller, and less advanced lesion involved the anterior inferior part of the fifth lumbar body. There was no collapse, but the adjacent horizontal edges of these bodies were indistinct, and the intervertebral disc was slightly narrowed. There was also a question as to whether or not the interpedicular space was increased in width.

The approach to diagnosis of this unusual case is by one of exclusion. Possibilities which must be considered in order of probability are: tumor of lumbocaudal sac invading bone, osteomyelitis, infectious spondylitis, tuberculosis, benign giant cell tumor, angioendothelioma, primary bone malignancy, metastatic bone malignancy, myeloma, and chordoma.

The involvement of the pedicles of the fourth, questionable expansion of the interpedicular space, the convexity anteriorly of the greatest destruction in the posterior third of the fourth lumbar body, are frequent changes associated with lumbocaudal lesions involving bone secondarily. However the same type of lesion apparently sharply localized to the anterior part of the fifth vertebrae is evidence against such a diagnosis. Also the probable narrowing of the disc suggests infection. In many cases presenting these findings it would be necessary to inject the lumbocaudal canal with a contrast media before one could definitely exclude this possibility. We suggested a complete neurological examination.

Osteomyelitis of the spine and infectious spondylitis are considered to be the same by some. The indistinctness of the horizontal plates, probable narrowing of the intervertebral disc and bone destruction are changes observed in osteomyelitis of the vertebrae. However, the pathologic process here is not that usually observed. Most often, osteomyelitis of the spine is acute in onset, with intense rarefaction of the horizontal plates, rapid loss of the intervertebral disc, followed by destruction of the adjacent surfaces of the bodies involved and later by calcification.

Fever and severe pain are usually present. The central destruction of the bodies is not characteristic of the usual type of osteomyelitis of the vertebrae.

Rarefaction in vertebral bodies followed by rapid destruction of the intervertebral disc after the process has broken through the horizontal plates, collapse of the vertebral bodies with the formation of a kyphos, and quite frequently the formation of a psoas abscess, is the usual pathologic process of tuberculosis of the spine. However, there is an infrequently encountered form of tuberculosis of the spine which presents in the form of cysts involving one or more vertebrae. This is spoken of as osteitis tuberculosa multiplex cystica. We have observed three cases which we thought were this form of tuberculosis of the spine. The lesions in this case are multiple, the horizontal plates are rarefied and indistinct, and the intervertebral disc is probably involved. There is no bone production and the destruction in the involved areas is com-

Read before the Jefferson County Medical Society.

plete. If this is a tuberculosis of the spine, the caseation must have been quite slow and there must have been considerable fibrosis.

The absence of trabeculation and expansion of the bodies, failure of fragmentation, excentric location, and the multiple lesions are not characteristic of a benign giant cell tumor. It is important that a benign giant cell tumor be correctly excluded as they are greatly benefited by X-ray therapy, and might thus influence the type of treatment selected.

Angioendothelioma cause parallel lines of rarefaction and bone sclerosis producing marked rarefaction and coarse trabeculation of the vertebral body, giving a honeycombed and spongy appearance. If malignant, the tumor invades the adjacent soft tissue and the accessory processes. It is usually a single tumor. Sometimes the vertebral body is expanded and fragmented.

Osteogenic sarcoma was excluded on the basis of this being a multiple lesion, the lack of collapse and fragmentation of the vertebral bodies, no evidence of bone proliferation, reasonably normal bone between areas of destruction, and again the probable cartilagenous destruction.

Myeloma causes complete lysis of bone involved and is most frequently a multiple lesion. It has to be considered here as a possibility. The absence of bone sclerosis excludes the osteoplastic type of metastatic carcinoma, and the osteolytic type of metastases would simulate myeloma. However, fragmentation of the vertebrae occurs rather early.

Chordoma arises from remains of the notochord and involves the sacrum primarily, and only involves the lumbar vertebrae by direct extension. The normal sacrum should exclude chordoma.

It is now seen that this lesion has one or more characteristics of the lesions mentioned above. Diagnosis is therefore uncertain. We concluded from the X-ray examination that this was a tumor, probably neurogenic in origin, invading the lower lumbar spine and suspected cystic tuberculosis of the spine. The roentgenograms had been sent to three nonresident specialists for consultation. One stated that the lesion was a benign giant cell tumor; another that there was no lesion present but that intestinal gas caused the defect, and a third, that a lesion was present but he had no idea of its type. These statements emphasize the difficulty of preoperative diagnosis. In the light of the history of pneumonia followed by backache for a period of time the unusual possibility of a sterile pneumococcic abscess is worthy of consideration.

X-ray served to call attention to the location of the disease responsible for backache when clinical symptoms and physical findings were inadequate. In this way the case meets the requirements of this clinical x-ray conference, even though we could not definitely catalogue the lesion.

The lesion of the fourth vertebrae involves the entire centrum of the fourth lumbar as well as the pedicles. The greatest destruction is in the posterior third where the anterior margin of greatest destruction is sharply convex. The destruction in the fifth involves only the anterior inferior part of the body.

It is interesting to follow the course of the lesion. This roentgenogram was made at the Kentucky Baptist Hospital after surgical incision of the abscess. The extent of the pathology is better demonstrated, probably the result of drainage. This is the condition in July, 1941, almost a year after the original examination. The increased density of bone shown on this antero-posterior roentgenogram is partly due to the graft which has taken well, but it is quite evident from the lateral roentgenogram that the cavity is being filled in with new bone. This X-ray shows the condition in March, 1942. The first impression is that there has been extension of the pathology, but closer observation reveals that the multilocular appearance has disappeared, that there is more new bone anteriorly, and the margins of the cavity are more sharply defined, which to me, indicate increased repair. The lesion of the fifth has healed. The final examination in August, 1942 showed more repair. It is interesting that the vertebrae have shown no tendency to collapse. They probably would have if the spine had not been fused.

The last time we heard from this patient he was in Washington, D. C., working daily and feeling well. Whether or not this is tuberculosis, or a pyogenic abscess, the end result justifies the treatment.

Black Eye Camouflaged: A quick easy method to camouflage a black eye is offered by Dr. H. Goodman, in New York, in the June Pennsylvania Medical Journal. He prescribes a preparation of bismuth subnitrate, suitably colored to match the skin. Soap and water cleaning of the discolored area, a layer of glycerine, then powder with bismuth.

TERMINATION OF PERNICIOUS VOMITING OF PREGNANCY BY DILATATION OF THE CERVIX

W. P. McKee, M. D.
G. E. McMunn, M. D.
Eminence

Case Report

Mrs. R. E. J., white female, age 19, November 30, 1940. At the onset of nausea and vomiting was put on ordinary vomiting of pregnancy routine. Gastric analysis was well within normal limits. Blood pressure, blood and urinary findings were all normal, no foci of infection.

Vomiting became progressively worse, and beginning January 28, 1941 she was given 1000 cc 10% glucose in normal saline daily, also one drachm sodium bromide per rectum every six hours with no remission of symptoms. February 2, she was removed to the hospital and given nothing by mouth for 24 hours, sodium luminal 5 grains hypodermically every 8 hours, 2000 cc 10% glucose in normal saline intravenously, and 1000 cc normal saline subcutaneously, daily. At the end of 24 hours she was allowed ½ ounce of water per mouth every 2 hours, which she was unable to retain. At this time the patient was very toxic, temperature 99.8 to 101.8, pulse 120 to 130, blood pressure, systolic 86 to 100, diastolic 50 to 70. The blood and urinary pictures were that of dehydration. The patient was vomiting continuously.

On February 5, 1941, she was given 500 cc citrated blood. Her condition became steadily worse, and on February 11, 1941 she was again given 500 cc citrated blood with the idea of doing a therapeutic abortion the following day. On February 12, 1941, under general anesthetic, the cervix was dilated with a Goodell dilator and a gauze pack inserted. A dilatation and curretage was not done because of the fear of encountering excessive bleeding. The patient never cramped or showed any sign of aborting. Her vomiting continued, and on February 15, 1941, at which time she had not aborted, the pack was removed and the cervix again dilated. The following day her vomiting ceased, and she was able to retain liquids. Her condition rapidly improved and she was allowed to go home on February 20, 1941. The remainder of her prenatal course was perfectly normal.

September 6, 1941 she was delivered of a normal female infant weighing 6¼ pounds.

Dilatation of the cervix as a method of treatment of hyperemesis gravidarum was first used by Copeman, of Norwich, in 1875, and subsequently became a recognized method of treatment, to be employed before abortion was induced, as a next to the last resort. DeLee states in his textbook that he used it once with failure.

Despite the fact that this case of hyperemesis gravidarum was cured by dilatation of the cervix, the intention was to produce abortion, the result being accidental rather than intentional.

BOOK REVIEWS

NIGHT OF FLAME, A novel by Dyson Carter. Published by Reynal and Hitchcock, Inc., 386 Fourth Avenue, New York City.

Here is a pageant of a great hospital wherein the drama of life—and death—is played at high tension. Night of Flame gathers up the whole of that small world and puts it under a microscope, in a story that is distinctive in its authentic background and the tautness of its telling.

Millionaires and mill hands, airplane pilots and window-washers, nurses and doctors, firemen and bankers, wealthy neurotics and common trollops, the lame and the halt and the tough-minded—a whole community frets and struts its hour upon this stage. Dyson Carter knows these people and lays bare their inner lives with the deft skill of a surgeon.

The spotlight plays chiefly around young Dr. Gerard Stevens and the women in his life—Joyce Rathwell, spoiled daughter of the hospital's wealthy benefactor who had always taken what she wanted of this world; Sonnie Draper, who let her heart rule her head; and Aileen, a nurse whose fresh innocence was like a heady drug. The constantly mounting tension of their relationships draws into their orbit the whole wing of the hospital, from the haughty superintendent of nurses to the lowliest ward patient.

ORTHOPEDIC SUBJECTS: Military Surgical Manuals Volume IV—Prepared and Edited by the Subcommittee on Orthopedic Surgery of the Committee on Surgery of the Division of Medical Sciences of the National Research Council. 306 pages with 79 illustrations. Philadelphia and London: W. B. Saunders Company, 1942. Price $3.00.

This volume is one of the series developed under the auspices of the National Research Council to furnish compact, yet with sufficient details, necessary information in the field of Orthopedic Military Surgery. The best of American Orthopedists are contributors to this volume.

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ANNUAL MEETING LOUISVILLE
OCTOBER 4-6, 1943

COUNTY SOCIETY REPORTS

Four County: The Four County Medico-Dental Society met in quarterly session on Tuesday night, August 24, 1943, Kuttawa Mineral Springs, Lyon County, and following a barbecue supper, Capt. K. L. Bell, dentist, Camp Breckinridge, discussed "The Doctor-Dentist Joins the Army," and Major S. E. Walpaw, M. C., Camp Breckinridge, discussed "The Early Diagnosis of Pulmonary Tuberculosis." A general discussion followed and valuable points were elicited.

In addition to Capt. Bell and Major Walpaw, others attending were: Physicians: Major Sanders Cohen, Capt. John Futrell, Camp Breckinridge; C. P. Moseley, D. J. Travis, Eddyville; T. L. Phillips, Kuttawa; L. A. Crosby, T. Atchison Frazer, Marion; E. N. Futrell, Cadiz; Paul L. White, Bumpus Mills, Tenn.; I. Z. Barber, W. C. Haydon, Frank T. Linton, C. B. Walker, W. L. Cash, Princeton. Dentists: B. L. Keeney, Princeton; T. W. Lander, Eddyville; P. J. Frazer, Marion.

The meeting was called to order by the president, T. L. Phillips, Kuttawa, and the minutes of the last meeting, held at Marion, Crittenden County, Tuesday night, May 25, 1943, were read by the Secretary and they were approved. The Society adjourned to meet again on the fourth Tuesday night in November, 1943, at Cadiz, Trigg County, with G. E. Hatcher, Cerulean, in charge of the program and arrangements assisted by E. N. Futrell, Cadiz.

W. L. Cash, Secretary

Harlan: The following is a list of names of the doctors of this county who have entered the service: Hobson Guthrie, Willard Buttermore, H. E. Bierley, Leo Esbin, E. H. Miller, J. L. Salmon, D. S. Merenbloom, M. Kaufman, J. D. Foley, L. E. Peyton, D. E. Smith, Thomas Giannini, A. W. Bradford.

W. R. Parks, Secretary

Madison: Dr. Hugh Mahaffey, Richmond physician and surgeon, has been commissioned a major in the medical corps of the army of the United States.

He reported on September 8 for six weeks' training and indoctrination at the Medical Field Service School at Carlisle Barracks, Pa., before reporting for duty at Stark General Hospital at Charleston, S. C.

Dr. Mahaffey is a graduate of the class of 1928 from the University of Louisville Medical School. He interned in Los Angeles before becoming a resident on the surgical staff at Louisville City Hospital. He studied at both Johns Hopkins Hospital in Baltimore and the Hospital for the Ruptured and Crippled in New York City.

Ten years ago Dr. McHaffey began the practice of medicine in Richmond. In 1940 he was elected to membership in the American College of Surgeons.

Max E. Blue, Secretary

Union: The Union County Medico-Dental Society met Tuesday evening, September 7, 1943 at 7 p. m. at the Sturgis Hotel, Sturgis.

The following members were present: Drs. C. B. Carr, D. M. Sloan, J. W. Conway, Bruce Underwood and J. F. Whitsell, Funeral Director.

Following a delicious dinner a short meeting was held discussing plans for a district medical meeting. Dr. Underwood reminded those present of the State Medical Association Meeting October 4, 5, 6. The motion picture scheduled for the evening failed to arrive and there being no further business the meeting adjourned.

Bruce Underwood, Secretary

Warren: The Warren County Medical Society met at the Helm Hotel in Bowling Green on Wednesday, August 25, 1943, with the following members present: Doctors Hal Neel, Paul Peterson, Huggins, S. J. Martin, T. H. Singleton, G. Y. Graves and Jno. H. Blackburn, all of Bowling Green, J. B. Helm, Smith's Grove and Finis London, Woodburn.

Dr. Paul Peterson in a very intelligent manner discussed "Maternal Welfare for War Mothers" and explained the operations of the present Bill. Several questions were asked regarding the Bill and satisfactory answers were presented.

The Wagner-Murray-Dingell Bill, Senate Bill, No. 1161 and House Bill No. 2861, were discussed by practically every member present. A committee consisting of Doctors Blackburn, Graves and Martin was appointed to draft resolutions to send to our Senators and members of the House of Representatives, and it was also moved that a copy of the resolutions be sent the Journal. It was also urged that members of the Society secure as many people as they could to write to our Senators and Representatives protesting against passage of the Bill.

Doctors G. Y. Graves, Bowling Green and J. B. Helm, Smith's Grove, were elected delegates to the State Medical meeting for 1943.

Jno. H. Blackburn, Secretary

Pre-marriage health examination laws were adopted this year by Missouri, Nebraska and Wyoming, so that statutory protection against syphilis is now provided in thirty states which contain more than 70 per cent of the nation's population.

NEWS ITEMS

Dr. John C. Baker, Richmond, President of the Madison County Medical Society was best man at the wedding of Miss Bernice Estridge and Capt. Ballard F. Robbins, U. S. Army Medical Corps, formerly a general practitioner at Berea.

Dr. O. P. Miller, formerly of Columbia, took over his duties as chief medical officer of the United States Veterans Hospital, Lexington, succeeding L. E. Trent, who was transferred to a veterans' hospital at Mendota, Wis.

Dr. J. E. Bohannon, Louisville, age 72, and a physician for more than forty years, died September 11th. He was a native of Marion County and a graduate of the University of Louisville Medical School.

Captain W. W. Buckhold, former Meade County health officer and only Kentucky physician captured by the Japanese is being held in the Phillipines. A Japanese prison form card has been received by his wife bearing his signature, saying he is in good health.

Dr. O. M. Goodloe, former county health officer of Mason County and Assistant Director of the county health work with the Kentucky State Department of Health since 1938, has resigned to take effect September 30th to join the Peoria, Illinois City Health Department as Deputy Commissioner and Director of maternal and child health.

A program designated to acquaint the University of Louisville medical students with Kentucky's public health was instituted by Dr. Hugh Leavell, Head of the Department of Public Health and Preventive Medicine of the University of Louisville. These students received lectures from each department head of the State Department of Health and then visited each of the Bureaus.

No phase of the War effort of the United States has shone more resplendently than the health of the men in the armed forces. Ninety-seven per cent of those wounded recovered. The high percentage, it was said, is due largely to the uses of blood plasma and the sulfa drugs.

Surgeon General Norman T. Kirk declares that disease has caused fewer casualties proportionately in the U. S. Army than in any armed force in all history. Those who recall the plagues of yellow fever, smallpox, typhoid and malaria which infected our troops in the Spanish-American War will have an even greater satisfaction over what is being accomplished today.

In almost every war in our history, disease has killed more soldiers than the enemy.

WOMAN'S AUXILIARY PAGES

By courtesy of The Journal, following sus pension of The Quarterly for The Duration

THE PRESIDENT

Mrs. John B. Floyd, Richmond



PRESIDENT'S MESSAGE

Mrs. John B. Floyd, Richmond

The Annual meeting October 4-6, 1943, will spell 'Finis' to my year of service to the Auxiliary, as your president. It has been an honor and a privilege to serve you. The friendly and encouraging associations experienced, will long remain a high light in my memories.

I want to take this opportunity to thank Mrs. Dulaney and Mrs. South, and all the others, for their wonderful help and cooperation. Especially do I want to thank all who were responsible in laboring so loyally and untiringly to make the Annual Meeting a success.

The turbulence of this second war year has not been conducive to expansion of the Auxiliary. It has been more a matter of just-holding-together, doing the duties as they presented themselves. In this day of specialized service groups, a united active front for a woman's subsidiary to the Medical Association, should present an outstanding opportunity.

Recently one of our Kentucky editors quoted in an editorial that "34% of the men of draft age were rejected for military service because of physical unfitness." Continued Health Education should make healthier people of the future. And, much good work has been done by the few active auxiliaries this past year. Kentucky needs more Health Education so that more of our men may be physically fit. Peace, no less than war, calls for physical fitness if success is to be attained. With my very best wishes to you in this worthy endeavor, I leave you under the leadership of our new President, Mrs. Octavus Dulaney.

MESSAGE OF THE PRESIDENT-ELECT

Mrs. Octavus Dulaney, Louisville

As your incoming President, I appreciate the great honor that you have conferred upon me and fully realize the responsibility of a presiding officer. My heartfelt desire is to be of service to you in every way. The success of our organization devolves upon the cooperation of each one of us.

Let us press onward with our present projects and in addition, we have been asked to consider several more, the most outstanding being War Participation and Post-War planning. The full particulars for these have not yet been received from the National Organization.

When we consider that over forty percent of the Nation's Physicians are now in the armed forces and that 6,000 more will be in Service before the end of the year, it becomes apparent that as Auxiliary members our primary concern is to keep our homes functioning smoothly for the ease of the Doctors serving the civilian population and to keep a refuge for those in Service. We want to be sure that the families whose medical men are away have proper medical care, and to do everything within our power for their well-being.

Keeping our vision upon the Father of us all, we shall be successful in our every enterprise.

OUR WOMEN IN SERVICE

Mrs. S. H. Flowers, a member of the Auxiliary from Middlesboro, is now serving as Lt. Viola C. Flowers, Assistant Public Relations Officer, First WAC Training Center, Fort Desmoines, Iowa; Miss Lucille Shacklette, daughter of Dr. and Mrs. J. R. Shacklette, Jeffersontown, now Lt. Shacklette, has been transferred from Fort Knox to Newport, Arkansas, Army Air Base, as Commanding Officer, 745th WAC Company; Miss Vonda Keith, now Captain Keith, daughter of the late Dr. D. Y. and Mrs. Keith, Louisville, graduated, August 22nd, from the Command and General Staff School, WAC, Fort Leavenworth, Kansas; Miss Thelma McIntyre, daughter of Dr. J. H. McIntyre, Springfield, serves as Sergeant McIntyre, at Lowry Field, Colorado, in the 751st. WAC Post Headquarters Company.

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SUSPENDED FOR THE DURATION

Now, that less and less emphasis is being placed on Auxiliary projects as we undertake more and more War Work, and, since newsprint shortage is becoming increasingly evident, it seems advisable that we suspend our publication of Auxiliary material for the Duration.

To the Kentucky State Medical Association, we wish to express our deep and sincere appreciation for the faith and confidence demonstrated in us when through the Advisory Council, we were requested to attempt the publication of an Auxiliary quarterly, supplement to the Kentucky Medical Journal, beginning in January, 1932. Continuous constructive support in our efforts has been heartening. Paper shortage last year demanded that we curtail our publication and the Journal generously shared its own pages with us for the quarterly issues of 1943. We are grateful for this courtesy.

To our loyal, faithful friends, the several business men and women who bought advertising space in our Quarterly, making it financially possible for us to have a publication, we again express our sincere thanks for all their many favors. Gallantly supporting our first timid ventures into the unknown world of publication, which, unfortunately for us, was timed at the beginning of the Great Depression, they have stood steadfastly by us through many vicissitudes, including the disastrous flood of 1937 and the present perilous Great War. We are grateful for this generous cooperation.

Although "now we see through a glass darkly," Faith points toward the future which holds better, brighter days for the world, when, perhaps, our business friends will join with us again in some greater undertaking.

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AUDITOR'S REPORT
of
KENTUCKY STATE MEDICAL ASSOCIATION
WOMAN'S AUXILIARY
LOUISVILLE, KENTUCKY
AUGUST 1, 1942—AUGUST 1, 1943

To the Woman's Auxiliary, Kentucky State Medical Association:
Mesdames:

We submit herewith report of our audit of the books and records of your Treasurer, Mrs. Luther Bach, and your Business Manager of "The Quarterly," Mrs. William H. Emrich, for the period beginning August 1, 1942, and ending August 1, 1943.

The various exhibits and statements submitted herewith set forth in detail the financial transactions for the period and show the condition of your affairs as reflected by our records.

We hereby certify that, in our opinion, the attached exhibits and statements correctly present the assets of the Woman's Auxiliary, Kentucky State Medical Association, at August 1, 1943, and its receipts and disbursements for the period from August 1, 1942, to August 1, 1943, as reflected by its records.

Respectfully submitted,
(Signed) Heimerdinger & Dennis
Certified Public Accountants

EXHIBIT "A"

RECEIPTS

Gross Dues and Initiation Fee Received	$ 142.25	
Less American Medical Association Auxiliary Dues	53.50	
State Dues Received 1942-1943 (1942 Membership)		$ 88.75

DISBURSEMENTS

Office Supplies, Postage and Badges	$ 13.25	
Printing and Stationery	72.00	
Bank Service Charge	1.11	
Purchase of Bond, Savings Account ($86.03) plus Additional	6.47	
Total	$ 92.83	
Less Contribution from Franklin County Auxiliary to Auxiliary Expense Fund	-25.00	
Total Disbursements		67.83
1942-1943 Balance		$ 20.92
Jane Todd Crawford Donations 1942-1943		6.35
Balance on hand August 1, 1942, Campbell County Bank, Bellevue, Kentucky (Auxiliary)	$ 114.18	
(Jane Todd Crawford)	22.37	136.55
Balance on hand, August 1, 1943, Campbell County Bank, Bellevue, Kentucky:		
(Auxiliary))	$ 135.10	
(Jane Todd Crawford)	28.72	$ 163.82
Funds on hand for deposit in hands of Treasurer (2 memberships 1943, Jefferson County Auxiliary)		$ 1.00

SAVINGS ACCOUNT

Louisville Trust Company, Louisville Refunding Certificate No. 15956		$ 26.61
Louisville Trust Company, Louisville August 1, 1942, Savings Account Balance in Name of Mrs. Luther Bach, Treasurer	$ 85.77	
Interest	.26	
Total Savings Account Deposited in Louisville Trust Company	$ 86.03	
Transferred to Checking Account, June 28, 1943 Additional Amount for Investment	6.47	
Total Invested in U. S. Savings Bonds-Purchase Price	$ 92.50	
Series F-100-Bond No. C 567611 F Series F- 25-Bond No. Q 263277 F Cash Value (Bonds in hands of Treasurer, Mrs. Luther Bach)		$ 93.75
Total Assets		$ 285.18

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EXHIBIT "B"

JANE TODD CRAWFORD MEMORIAL FUND

1940-1943

RECEIPTS DEPOSITED IN CHECKING ACCOUNT

1940		
Dec. 6—Franklin County Auxiliary, Frankfort	$ 5.00	
Dec. 14—Sampson Community Hospital, Glasgow	3.05	
1941		
Apr. 25—Mrs. Bernard Asman, Louisville	2.00	
Total 1940-1941		$ 10.05
1941		
Oct. 1—Mrs. Evan Garrett, Murray	$ 2.00	
Dec. 2—Mrs. Ida E. Sams, Louisville (Jefferson County)	5.32	
Dec. 15—Mrs. R. M. Coblin, Frankfort	3.00	
1942		
Feb. 12—Mrs. R. M. Coblin, Frankfort	2.00	
Total 1941-1942		12.32
Sept. 25—Licking Valley Auxiliary	$ 2.35	
Sept. 30—Muriel Z. Marshall, Berlin New Hampshire	3.00	
Nov. 12—Mrs. Earl Brennan, Dallas, Texas	1.00	
Total 1942-1943		6.35
Total to Date		$ 28.72

EXHIBIT "C"

PAID MEMBERSHIP TO AUGUST 1, 1943

	1940	1941	1942	1943
Breathitt	15	—	—	—
Calloway	10	—	—	—
Campbell-Kenton	14	6	—	—
Daviess	—	20	20	—
Franklin	24	16	24	—
Graves	12	13	—	—
Hardin	15	17	—	—
Jefferson	124	177	145	2
Letcher	—	7	—	—
Madison	33	32	33	—
Marshall	10	8	5	—
Mercer	15	—	—	—
Whitley	—	13	15	—
Licking Valley	16	9	—	—
Sampson Community Hospital	23	20	—	—
State at Large	16	18	19	1
Total	—	—	—	—
	327	356	261	3

242 Memberships (from County Auxiliary) (1942)	at .50		$121.00
19 State at Large Memberships (1942)	at 1.00		19.00
1 State at Large Membership (1941)	at 1.00		1.00
1 State at Large Membership (1943)	at 1.00		1.00
1 Membership (Jefferson County) (1941)	at .25		.25
Total Dues Collected 1942-1943			$142.25

EXHIBIT "D"

Detailed Statement of Receipts and Disbursements of Mrs. Luther Bach, Treasurer Woman's Auxiliary, Kentucky State Medical Association, from August 1, 1942, to August 1, 1943.

		Receipts	Disbursements
1942			
Aug. 1.—Balance Forward:			
Woman's Auxiliary	$ 114.18		
Jane Todd Crawford Fund	22.37	$136.55	
Sept. 1—Dues, State-at-Large (3 years) Mrs. Viola Cawood Flowers 2403 Cumberland Ave., Middlesboro		3.00	
Sept. 1—Check No. 51 to Mrs. Luther Bach For Postage			1.50
Sept. 4—Contribution from Franklin County Auxiliary to Auxiliary Expense Fund Mrs. Bernard Asman		25.00	

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Supporters

Sept. 25—Jane Todd Crawford Fund Licking Valley Auxiliary Mrs. S. B. Nunnelly, Hebron, Kentucky	2.35	
Sept. 25—Dues, State-at-Large Mrs. M. E. Hoge, Jackson, Kentucky	1.00	
Sept. 25—Dues, State-at-Large Mrs. H. June Jett, Jackson, Kentucky	1.00	
Sept. 25—Dues, State-at-Large Miss Mattie Lee Redwine, Jackson, Kentucky	1.00	
Sept. 25—Check No. 52 to State Journal Company Frankfort, Kentucky Delegate and Alternate Cards		3.50
Sept. 25—Dues, State-at-Large Mrs. J. I. Greenwell, New Haven, Kentucky	1.00	
Sept. 30—Check No. 53 to Wachtel Company Louisville, Kentucky Badges and Ribbons		11.75
Sept. 30—Check No. 54 to Mrs. Wm. Emrich Printing of Hand Book in July Quarterly		50.00
Sept. 30—Check for Jane Todd Crawford Fund Muriel Z. Marshall, Berlin, New Hampshire	3.00	
Oct. 7—Dues, State-at-Large Mrs. Chas. Vance, Lexington, Kentucky	1.00	
Oct. 7—Dues, State-at-Large Mrs. Geo. W. Wilson, Lexington, Kentucky	1.00	
Oct. 7—Dues, State-at-Large Mrs. Charles B. Stacy, Pineville, Kentucky	1.00	
Oct. 7—Dues, State-at-Large Mrs. E. C. McGehee, Ashland, Kentucky	1.00	
Oct. 7—Dues, State-at-Large Mrs. O. E. Ferguson, Cloverport, Kentucky	1.00	
Oct. 7—Dues, State-at-Large Mrs. J. A. Outland, Murray, Kentucky	1.00	
Oct. 7—Dues, State-at-Large Mrs. Clark Bailey, Harlan, Kentucky	1.00	
Oct. 7—Dues, State-at-Large Mrs. A. W. Davis, Madisonville, Kentucky	1.00	
Oct. 7—Dues, State-at-Large Mrs. L. S. Hayes, Louisa, Kentucky	1.00	
Oct. 7—Dues, State-at-Large Mrs. W. B. Atkinson, Campbellsville, Kentucky	1.00	
Nov. 5—Dues, State-at-Large Mrs. Lyman Hall, Campbellsville, Kentucky	1.00	

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Nov. 5—Dues for 2 members, Jefferson County (1941) Mrs. Lois Herrmann, Louisville, Kentucky			1.00	
Nov. 25—Dues, Jefferson County Auxiliary Mrs. Lois Herrmann, Louisville, Kentucky			77.75	
Nov. 12—Check for Jane Todd Crawford Fund Mrs. Earl Brennan 6305 Belmont Ave., Dallas, Texas			1.00	
Nov. 30—Check No. 55 to State Journal Company Frankfort, Kentucky Priuting 1,000 Ballots				1.75
Dec. 1—Check No. 56 to Mrs. H. C. Herrmann Refund on Jefferson County Auxiliary Dues—had sent too much				5.00
1943				
Jan. 17—Check No. 57 to Times-Journal Publishing Co. Bowling Green, Kentucky For Stationery				13.00
Feb. 15—Bank Service Charge				.21
Mar. 3—Dues, Daviess County Auxiliary Mrs. Horace Harrison, Owensboro, Kentucky			10.00	
Mar. 3—Dues, Franklin County Auxiliary Mrs. R. M. Coblin, Frankfort, Kentucky			12.00	
Mar. 30—Dues, Marshall County Auxiliary Mrs. Emma Eddleman, Benton, Kentucky			2.00	
May 7—Check No. 58 to Mrs. D. W. Thomas Dues for 1942 from Kentucky to A.M.A.				53.50
May 19—Dues, State-at-Large Mrs. Owen Carroll, Newcastle, Kentucky			1.00	
May 19—Dues, State-at-Large Mrs. T. B. Ginn, Vanceburg, Kentucky			1.00	
May 19—Dues, State-at-Large Mrs. Walker Owens, Mt. Vernou, Kentucky			1.00	
May 30—Dues, Whitley Couuty Auxiliary Mrs Jane Ohler, Corbin, Kentucky			7.50	
May 28—Dues, Madison County Auxiliary Mrs. John C. Baker, Berea, Kentucky			12.50	
June 10—Bank Service Charge				.24
June 18—Dues, Madison County Auxiliary Mrs. John C. Baker, Berea, Kentucky			4.00	
June 26—Check from Louisville Trust Company (Amount of Savings Account of the Auxiliary to Kentucky State Medical Association)			86.03	
June 28—Check No. 59 to Campbell County Bank One $100.00 War Bond	$ 74.00			
One 25.00 War Bond	18.50			92.50
July 12—Dues, Marshall County Auxiliary for Mrs. Kennedy, Benton, Kentucky Mrs. Emma Eddleman			.50	
July 14—Bank Service Charge				.66
July 19—Check No. 60 to Richmond Register Company Printing Delegate and Alternate Cards				3.75
Check returned unpaid (Woman's Auxiliary to Jefferson County Medical Association)				1.00
Total receipts, plus balauce brought forward beginning of period			$402.18	
Total Disbursements				$238.36
Balance on hand, Campbell County Bank, Bellevue, Kentucky, August 1, 1943				163.82
Woman's Auxiliary	$135.10			
Jane Todd Crawford Fund	28.72			
Total	$163.82			
			$402.18	$402.18
Aug. 1—Funds on hand for deposit (Jefferson County Auxiliary Membership Dues (2) for 1943)	$1.00			

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EXHIBIT "E"

Financial Statement of Mrs. William H. Emrich, Business Manager, from August 1, 1942, to August 1, 1943, on account of The Quarterly, Supplement to the Kentucky Medical Journal, corresponding with checks, deposits and receipts filed.

RECEIPTS

THE QUARTERLY:			
Receipts from Advertisers—August 1, 1942, to August 1, 1943:			
Old Accounts Paid:			
Total Collections, Old Accounts		$ 89.18	
1943 Accounts	$431.31		
Less Refunds	30.62	400.69	
Total Received from Advertisers			$489.87
Kentucky State Medical Association 1942 and 1943 (Commission on Ads)			15.81
Kentucky State Medical Auxiliary for printing Handbook in July, 1942, issue of Quarterly			50.00
Style Show at Annual Luncheon, 1942			58.95
Total Quarterly Receipts 1942-1943			$614.63

DISBURSEMENTS

Kentucky Medical Journal Auxiliary pages, Feb., April, July, 1943		$122.11	
Postage and Express		10.38	
Commission on Advertisements—20 percent on $465.94 (Collections) Mrs. Jos. E. Wier		93.20	
Total Quarterly Disbursements 1942-1943			$225.69
Excess of Income Over Expenses Collected 1942-1943			$388.94
Balance in Liberty National Bank and Trust Company, Louisville, beginning of period			48.63
Quarterly Net Balauce August 1, 1943			$437.57
Jane Todd Crawford Story:			
Total Receipts		$126.01	
Total Disbursements		120.15	
Jane Todd Crawford Story Balance August 1, 1943			$ 5.86
Total Balance agreeing with Bank Balance as of August 1, 1943, Liberty National Bank and Trust Company, Louisville			$443.43
Bank Balance August 1, 1943	$476.31		
Less outstanding Check No. 81—Mrs. Jos. E. Wier, Commission on Ads	32.88	443.43	
ACCOUNTS RECEIVABLE:			
1941	$ 31.25		
1942	23.93		
1943	31.25		86.43
Total assets			$529.86
LIABILITIES:			
Accounts Payable			- - - -
Kentucky Hotel Acct. Paid Aug. 27, 1943			35.00
Net Worth			$564.86

EXHIBIT "F"

THE QUARTERLY

ACCOUNTS RECEIVABLE

FIRM	AGENT		AMOUNT
1941			
Denhard, Brooks	Mrs. Joseph Wier	$20.00	
Jaglowiez, Jas.	Mrs. Joseph Wier	11.25	$31.25
1942			
Bush-Krebs Company	Mrs. Joseph Wier	3.93	
Denhard, Brooks	Mrs. Joseph Wier	20.00	$23.93
1943			
Baynham Shoe Company	Mrs. Joseph Wier	8.75	
Crutcher Dental Depot	Mrs. Joseph Wier	11.25	
Model Drug Company	Mrs. Joseph Wier	11.25	$31.25
Total			$86.43

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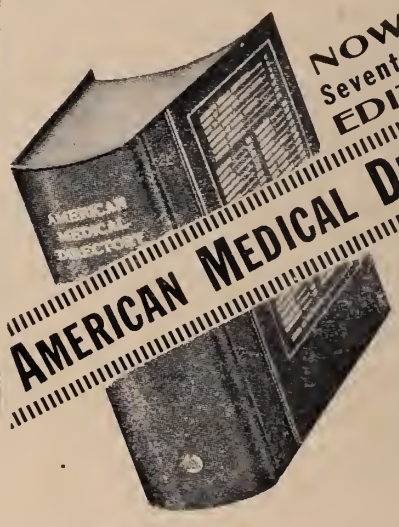
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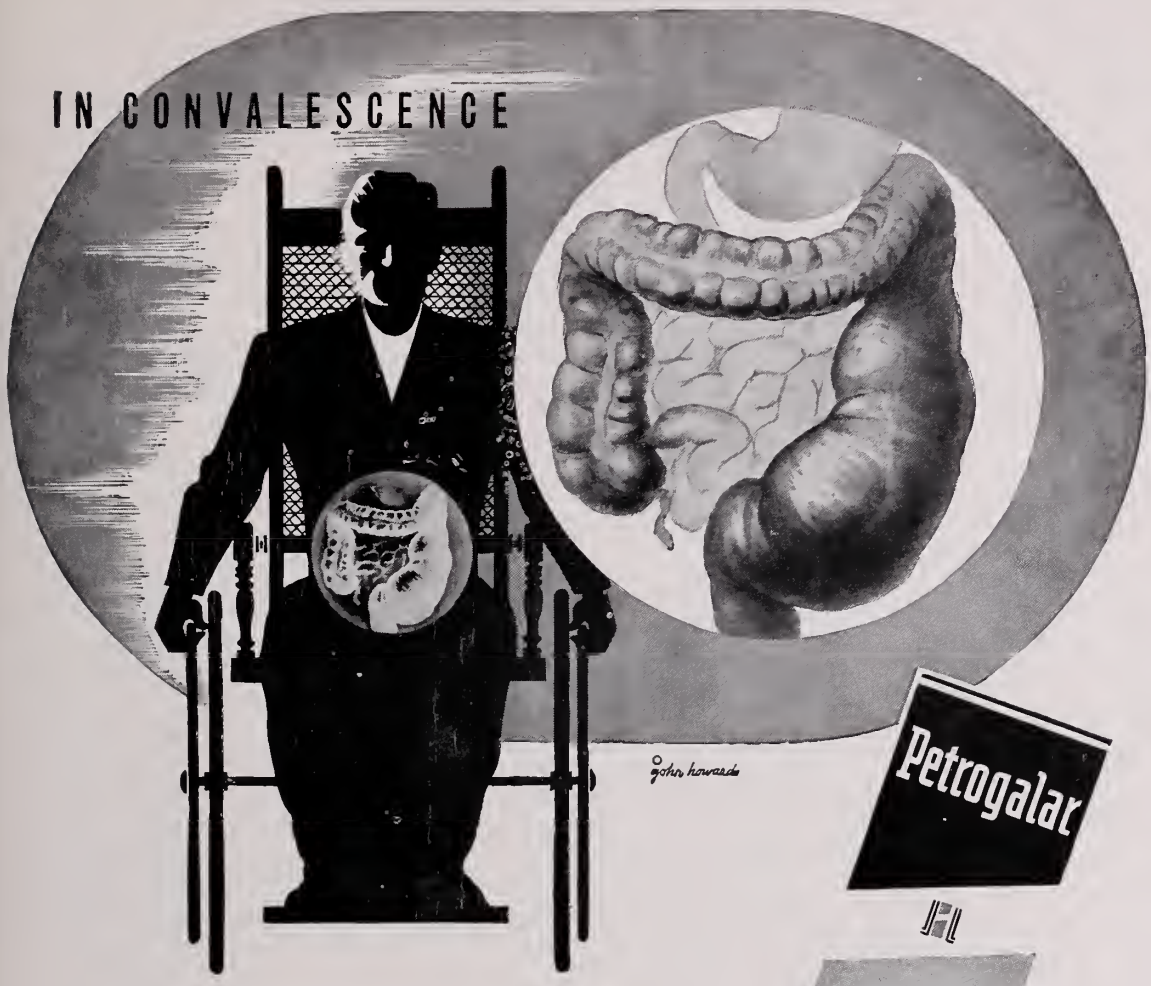


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OF MEDICINE
NOV 15 1943

KENTUCKY
MEDICAL JOURNAL

Published Monthly by the Kentucky State Medical Association Under the Supervision of the Council

VOL. 41, NO. 11 BOWLING GREEN, KY. NOVEMBER, 1943

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Editorial and Business Offices, 519 Tenth Street Subscription Price, $5.00; Single Copy, 50 cents
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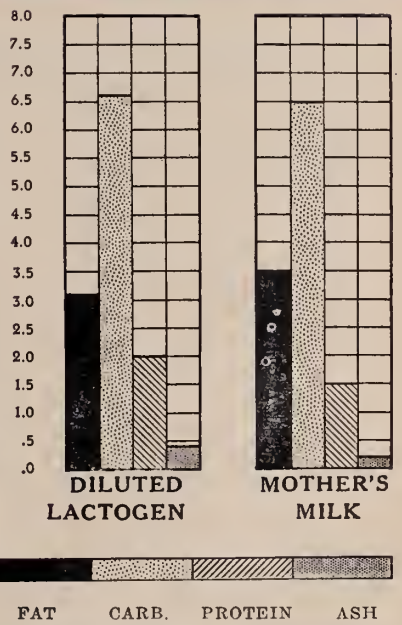


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John Lovett Morse, A, M., M. D.
Clinical Pediatrics, p, 156.

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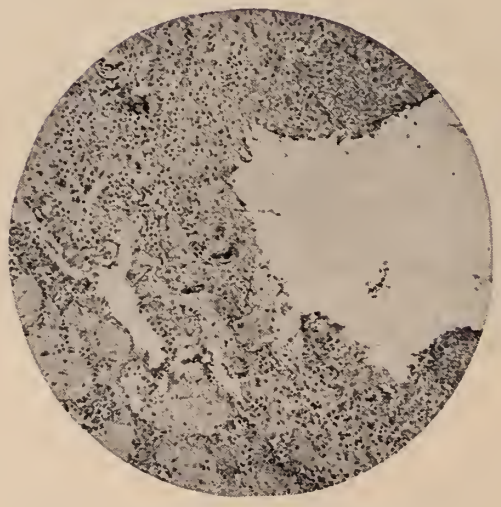
Bacillary Dysentery in Adults . . .

SULFAGUANIDINE

Lederle

THE SERIOUS PATHOLOGY of the colon and rectum, frequently found following severe acute bacillary dysentery in adults, may be averted by the early oral administration of sulfaguanidine.

The use of sulfaguanidine for the treatment of dysentery carriers has been suggested.



Photomicrograph showing cytological detail in acute lesion of mucosa of colon. Magnification x 650.

REFERENCES:

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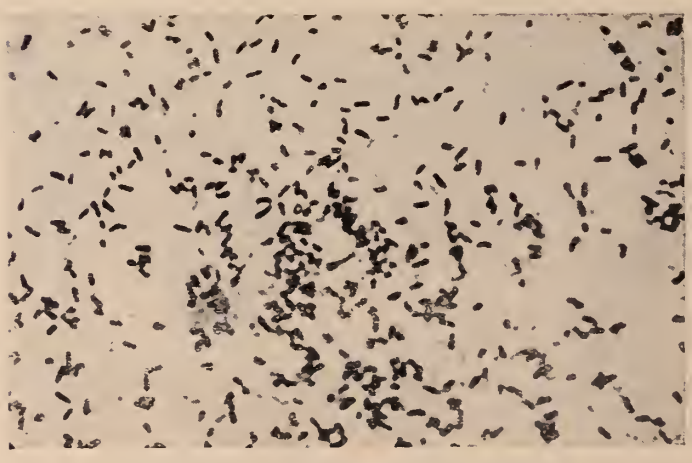
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Photomicrograph of Dysentery Bacillus—Flexner—(*Shigella paradysenteriae*) Initial magnification x 1500.

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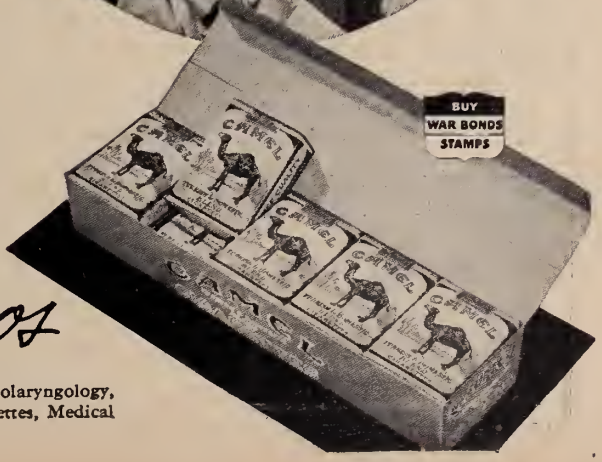
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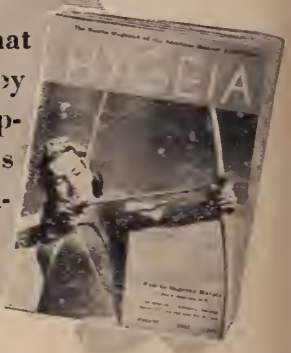
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COUNTY	SECRETARY	RESIDENCE	DATE
Adair	W. Todd Jefferies	Columbia	November 8
Allen	A. O. Miller	Scottsville	November 24
Anderson	J. B. Lyon	Lawrenceburg	November 1
Ballard	F. H. Russell	Wickliffe	
Barren	C. R. Markwood	Glasgow	November 17
Bath	H. S. Gilmore	Owingsville	November 8
Bell	Edward S. Wilson	Pineville	November 12
Boone	R. E. Ryle	Walton	November 17
Bourbon	George M. Jewell	Paris	November 18
Boyd	R. G. Culley	Ashland	November 2
Boyle	P. C. Sanders	Danville	November 16
Bracken-Pendleton	W. A. McKenney	Falmouth	November 25
Breathitt	M. E. Hoge	Jackson	November 16
Breckinridge	J. E. Kincheloe	Hardinsburg	
Bullitt	George B. Hill	Mt. Washington	
Butler	D. G. Miller, Jr.	Morgantown	November 3
Caldwell	W. L. Cash	Princeton	November 2
Calloway	J. A. Outland	Murray	
Campbell-Kenton	Robert L. Biltz	Newport	November 4
Carlisle	E. E. Smith	Bardwell	November 2
Carroll	H. Carl Boylen	Carrollton	
Carter	Don E. Wilder	Grayson	November 9
Casey	Wm. J. Sweeney	Liberty	November 25
Christian	H. B. Stone	Hopkinsville	November 16
Clark	W. Carl Grant	Winchester	November 19
Clay	L. H. Wagers	Manchester	
Clinton	S. F. Stephenson	Albany	November 20
Crittenden	C. G. Moreland	Marion	November 8
Cumberland	W. F. Owsley	Burkesville	November 3
Daviess	W. H. Parker	Owensboro	November 9 & 23
Estill	Virginia Wallace	Irvine	November 10
Fayette	Charles D. Cawood	Lexington	November 9
Fleming	Roy Orsburn	Flemingsburg	November 10
Floyd	Robert Sirkle	Weeksbury	November 24
Franklin	E. K. Martin	Frankfort	November 4
Fulton	John G. Samuels	Hickman	November 10
Gallatin	J. M. Stallard	Sparta	November 18
Garrard	J. E. Edwards	Lancaster	November 18
Grant	Wallace Byrd	Williamstown	November 17
Graves	H. H. Hunt	Mayfield	November 2
Grayson	E. B. Deweese	Caneyville	
Green	S. J. Simmons	Greensburg	November 1
Greenup	Virgil Skaggs	Russell	November 12
Hancock	F. M. Griffin	Hawesville	November 1
Hardin	D. E. McClure	Elizabethtown	November 11
Harlan	W. R. Parks	Harlan	November 20
Harrison	W. B. Moore	Cynthiana	November 1
Hart	Vinson Corrao	Munfordville	November 2
Henderson	Walter L. O'Nan	Henderson	November 8 & 22
Henry	Owen Carroll	New Castle	November 11
Hickman	H. E. Titsworth	Clinton	November 4
Hopkins	Wm. H. Garnier	Madisonville	November 11
Jefferson	Herman Mahaffey	Louisville	November 1 & 15
Jessamine	J. A. VanArsdall	Nicholasville	November 18
Johnson	Paul B. Hall, Act. Sec.	Paintsville	November 22
Knox	T. R. Davies	Barbourville	November 18
Larue			
Laurel	Oscar D. Brock	London	November 10
Lawrence	L. S. Hayes	Louisa	November 15
Lee	A. B. Hoskins	Beattyville	November 13
Letcher	Bert C. Bach	Whitesburg	November 30
Lewis	Elwood Esham	Vanceburg	November 15
Lincoln	Lewis J. Jones	Hustonville	November 19
Livingston	T. L. Radcliffe	Smithland	
Logan	E. M. Thompson	Russellville	
Lyon	H. H. Woodson	Eddyville	November 2
McCracken	Leon Higdon	Paducah	November 24
McCreary	R. M. Smith	Stearns	November 1
McLean	F. L. Johnson	Livermore	November 11
Madison	Scott McGuire, Jr.	Berea	November 18
Magoffin	Lloyd M. Hall	Salyersville	
Marion	Nelson D. Widmer	Lebanon	November 23
Marshall	S. L. Henson	Benton	November 17

COUNTY	SECRETARY	RESIDENCE	DATE
Mason	C. W. Christine	Maysville	November 10
Meade			
Menifee	E. T. Riley	Frenchburg	
Mercer	J. Tom Price	Harrodsburg	November 9
Metcalfe	E. S. Dunham	Edmonton	
Monroe	Geo. E. Bushong	Tompkinsville	
Montgomery	D. H. Bush	Mt. Sterling	November 9
Muhlenberg	Claude Wilson	Greenville	November 9
Nelson	Keith Crume	Bardstown	
Nicholas	T. P. Scott	Carlisle	November 15
Ohio	Oscar Allen	McHenry	November 3
Owen	K. S. McBee	Owenton	November 4
Owsley	W. H. Gibson	Booneville	November 1
Perry	Lewis C. Coleman	Hazard	November 8
Pike	S. B. Casebolt	Pikeville	November 4
Powell	I. W. Johnson	Stanton	November 1
Pulaski	Robert G. Richardson	Somerset	November 11
Robertson	Logan T. Lanham	Mt. Olivet	
Rockcastle	Robert G. Webb	Livingston	November 5
Rowan	I. M. Garred	Morehead	November 8
Russell	J. R. Popplewell	Jamestown	November 8
Scott	A. F. Smith	Georgetown	November 4
Shelby	C. C. Risk	Shelbyville	November 18
Simpson	N. C. Witt	Franklin	November 9
Spencer	M. H. Skaggs	Taylorsville	
Taylor	L. S. Hall	Campbellsville	November 4
Todd	B. E. Boone, Jr.	Elkton	November 3
Trigg	Elias Futrell	Cadiz	
Union	E. Bruce Underwood	Morganfield	November 2
Warren-Edmonson	John H. Blackburn	Bowling Green	November 10
Washington	J. H. Hopper	Willisburg	November 17
Wayne	Frank L. Duncan	Monticello	
Webster	C. M. Smith	Dixon	November 26
Whitley	C. A. Moss	Williamsburg	November 4
Wolfe	John L. Cox	Campton	November 1
Woodford	George H. Gregory	Versailles	November 4

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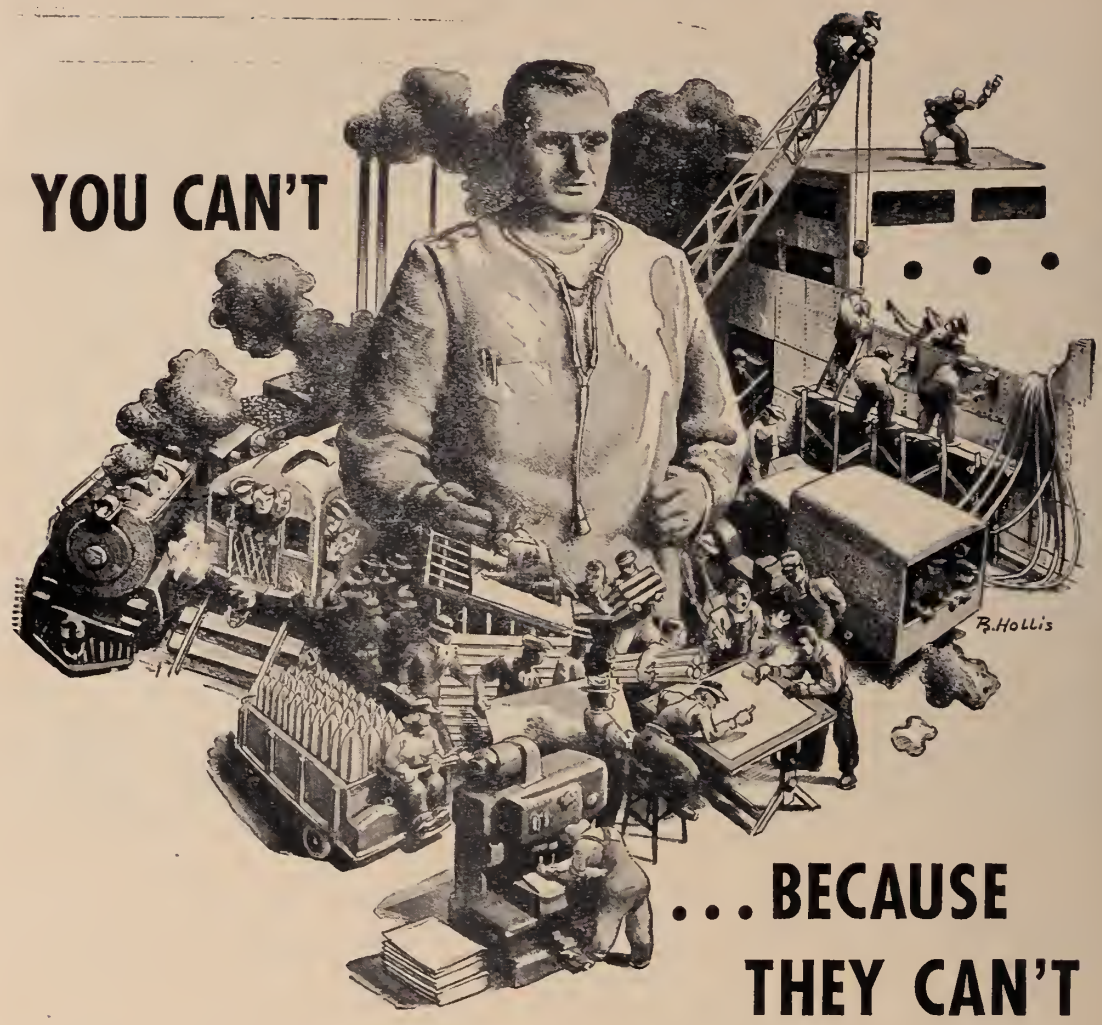
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BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

VOL. 41, NO. 11 BOWLING GREEN, KY. NOVEMBER, 1943

THE ANNUAL MEETING

The Ninety-third Annual Meeting of the Kentucky State Medical Association is now a matter of history. It was unique in many ways, not the least of which was the absence from the Scientific Program of representation from the membership of the Association, except the Orator in Medicine, the Orator in Surgery and Brig. General Fred W. Rankin. It was a Graduate Program in the truest sense and the contributions by our distinguished guest speakers were met with such enthusiastic response that many doctors were heard to say during the meeting that they would like to see at least one day of future meetings set aside for a Graduate Program. It is at least worth thinking about and may well be brought to the attention of the House of Delegates next year.

Not only was the attendance upon the meeting remarkable in face of the extraordinarily heavy program carried by our doctors and the difficulties in connection with transportation, but the actual attendance upon program sessions and the attentive hearing given each speaker indicated an appreciation of this type of program that did indeed compliment our guests. It will be a source of pride to the members to know that one of the very distinguished visitors has written to the Editor, saying that he had attended many medical meetings, including State meetings, but he considered this the best and the real high light in his experience with medical organizations.

MEDICAL ETHICS

The Report of the Committee on Medical Ethics for the State Medical Association, consisting of Dr. Guy Aud, Chairman, and Drs. T. A. Frazer and Karl Winter, met with such a popular response in the House of Delegates that several of the members urged that it be published as an Editorial in the Journal. It is hereby reproduced in full and will, no doubt, revive in the minds of all, a renewed sense of ethical responsibility:

"Since no case of infraction of the rules of conduct governing the members of this Association has been referred to your Committee on Medical Ethics during the past year, the Committee would like to take this opportunity of restating some of the principles of medical ethics to which we subscribe.

As you know, the Kentucky State Medical Association adopted and is governed by the Principles of Medical Ethics of the American Medical Association. This should be the practice of every state medical society in the United States in order that there might be but one rule of conduct governing the entire medical profession of America, rather than a separate code for each state.

The Principles of Medical Ethics as adopted by this Association is but a statement of the underlying principles of conduct which apply to the relation of every physician with his patients, with the public and with his fellow practitioners of medicine. The principles are not laws to govern actions in detail but to guide conduct. The basic principle underlying all ramifications of a doctor's professional life is stated in the opening sentences of the published Principles of Medical Ethics: 'A profession has for its prime object the service it can render to humanity; reward or financial gain should be a subordinate consideration. The practice of medicine is a profession. In choosing this profession an individual assumes an obligation to conduct himself in accord with its ideals.' That has been the basic principle of medical ethics since the time of Hippocrates. Medicines methods may change, its economics may change, its science may change, but its principles of ethics do not change. Government and lay organizations may disrupt and negate the operation of our Principles of Medical Ethics for a time or in part, but it always will remain the principles of right conduct for our profession and will prevail just as long as government and law permit."

OUR RESPONSIBILITY

The House of Medicine is in danger. Not only is it subject to attack from without, but lack of intelligent planning has allowed the very foundation to decay almost beyond repair.

It can no longer be contended that the American people receive complete medical care. Individually many of them do; collectively they do not. This is revealed by the fact that more than 40% of the male population, between the ages of 18 and 38, in Kentucky have been found physically or mentally unfit to serve their country in military service. Roughly, of every 7 men sent for induction 4 are found fit, 2 are rejected because of physical defects and one is rejected because of a mental or educational defect. These are young men presumed to be in the most healthy period of life; the ones upon whom the State must depend for years to come.

If such is the state of the younger group, what of the older ones who have reached the age subject to degenerative diseases? What of the children born of these handicapped parents, who will find it difficult to provide the environment conducive to a sound body and a sound mind? With this background, is it any wonder that the average family income in Kentucky is under $500.00 per year?

The technical and scientific achievements of medicine are worthy of our pride. That they have been of value to a limited degree only is not so commendable. A large share of this fault is on the shoulders of the medical profession. More than half of our mothers do not receive any prenatal care, and many others have only the excuse for it. A number of our doctors do not believe that prophylactic measures should be given to the people. So much time is consumed in the care of those who fear pain or death that none is left in which the others may be told how to avoid a like fate. The symptoms of approaching death are so much more easy of recognition, that those of approaching illness have been neglected. The average man does not know when to visit his physician because we have not told him. It has been forgotten that "an ounce of prevention is worth a pound of cure."

The medical profession has delivered itself into the hands of our larger hospitals, who, in turn, have all but strangled the smaller institutions. A lay board decides many medical problems—what physicians are qualified to make use of its facilities, and what portion of these facilities may be used by one or the other; how long an expectant mother may be in labor before the staff obstetrician must be called in consultation. The number of nurses to be trained, at almost prohibitive cost, to care for its own needs. Three instances may be cited:

A mother, who, postpartum, had a small benign growth removed from her foot and also developed a slight cold, was required to have the services of a surgeon, an internist, and a pediatrician, in addition to her own physician who delivered her. Is there any wonder that we have a shortage of doctors?

A physician who took a patient to a hospital to have an X-ray of an extremity, was told that he must call an orthopedist to apply a cast since he did not have the privilege of the operating room.

A physician was attending the confinement of a patient. When she failed to deliver after 6 hours, the staff obstetrician was called in consultation without his request.

Those with minor ailments who have hospitalization insurance have so filled our hospitals that the truly ill find it difficult to find accommodations. Hospital charity patients have become so rare that each should be reported in the literature. Did someone remark, "Money makes the mare go?"

Pseudo and real social agencies, beginning with the much publicized "Study of the Cost of Medical Care" of the last decade, and continuing in various quarters since, have attempted to overwhelm us for many years. The fallacy of their cause is known; the purity of their motive is suspected. If we set our own house in order, if we make plans for the future adequate care of the people, if we near the goal that many of us do not even know exists, we can still be masters in our "House of Medicine." If we do not these things, we shall be contributors to our own subjugation.

W. B. Atkinson

POST GRADUATE EXTENSION COURSE AT MAYFIELD

W. W. Nicholson, Chairman of the Postgraduate Extension Course of the Kentucky State Medical Association, is sponsoring a very interesting meeting which will be held at Mayfield for four consecutive Thursdays, beginning October 28th and ending November 18th. The program will begin at 4:00 P. M. at the Hall Hotel. Dinner will be served from 6 to 7 P. M. and discussions will continue to 9 P. M.

We have secured for this course the

very best physicians who are authorities on their subjects. The Graves County Medical Society is the host and cordially invite all doctors in that district to be present. The program is as follows:

THURSDAY, OCTOBER 28
AFTERNOON SESSION

4-5—J. B. Floyd, M. D.
Unrecognized Tuberculosis and X-Ray Findings.
5-6—J. G. Sherrill, M. D.
Cancer
6-7—Dinner Hour
7-8—Walter E. Doyle, M. D.
"Save a Day" (Moving Picture)
8-9—Milton Wilder, M. D.
Sister Kenney Treatment
(Moving Picture)

THURSDAY, NOVEMBER 4

4-5—J. G. Sherrill, M. D.
Fractures
5-6—Alice D. Chenoweth, M. D.
Emergency Relief
6-7—Dinner Hour
7-8—Benj. Brock, M. D.
Tuberculosis
8-9—H. L. Linn, M. D.
Obstetrics
(Moving Picture)

THURSDAY, NOVEMBER 11

4-5—J. E. Dunn, M. D.
Childhood Pneumonias
5-6—Maj. Woodford B. Troutman
Heart Murmurs
6-7—Dinner Hour .
7-8—A. J. Miller, M. D.
Pathology of the Heart.
8-9—Maj. Woodford B. Troutman
Coronary Thrombosis.

THURSDAY, NOVEMBER 18

4-5—Lt. Col. Sidney V. Kirby
Perforations of the Viscera
5-6—H. G. Reynolds, M. D.
Glaucoma
6-7—Dinner Hour
7-8—Walter E. Doyle, M. D.
Occupational Diseases
8-9—Leon Higdon, M. D.
Obstetrics (Moving Pictures)

CURRENT COMMENTS

While the following Resolution, adopted by the Kentucky State Medical Association at its recent Session, was mailed to each physician in the State, to the Secretary of the American Medical Association, to Secretaries of constituent State Medical Associations, to the Press generally, and to the Senators and Representatives from Kentucky, it is herewith reproduced for record in the Journal.

All members of the Association have been urged by letter to communicate with their Congressmen and Senators, impressing upon them the importance of their lending their influence to defeat passage of this type of legislation as it affects so seriously the high standards of the profession as developed through years of unselfish devotion to scientific achievement and professional service to the public.

The Resolution follows:

"WHEREAS, there has been introduced in the Congress of the United States a Bill (S1161; H.R. 2861) known as the Wagner-Murray-Dingell Bill, adding to and extending Social Security legislation; and

WHEREAS, this Bill, in part, is intended to provide Federal control of medical and hospital services for all citizens earning $3,000.00 a year, or less, which constitutes 93% of the population; and

WHEREAS, this nation was founded on free enterprise, and an opportunity for one to pursue his life's work, stimulated by the ideals and ethics that dominate a profession devoted to the service of mankind; and

WHEREAS, approximately one-third of the physicians of our country, together with many other patriotic men and women whose interests are affected, and who, because of these circumstances, are not permitted to give expression to their wishes in regard to such legislation; and

WHEREAS, the general death rate in 1942 was the lowest on record and the maternal and infancy death rates have continued to decline in recent years in the face of the stress of war, indicating that the medical profession is always prepared to rise to any emergency and fulfill its responsibility; and

WHEREAS, a great majority of our physicians are now extending their every effort to safeguard the health and lives of our civilian population, this legislation would result in the distribution of a medical service of inferior quality, and

WHEREAS, Senate Bill 1161 would create a class of political doctors subject to the influence of political practice in seeking emoluments and avoiding burdens, becoming a menace both to the patient and the public,

NOW, THEREFORE, BE IT RESOLVED: That the State Medical Association of Kentucky, in convention assembled, does protest the passage of this Bill and calls upon our Senators and Representatives in Congress to do their utmost to defeat it."

The attention of visiting and attending hospital staffs is called by Dr. William S. Keller, Regional Medical Officer of the U.

S. Office of Civilian Defense, to an unusual opportunity to relieve congestion of patients at hospitals.

Several hundred ambulance bodies provided by the U. S. Office of Civilian Defense are being made available to communities requesting them, according to Doctor Keller.

The chassis to hold the bodies must be supplied locally. The hospital trustees or board of governors will in many cases want to endorse purchase of the chassis when the matter is laid before them, Dr. Keller points out. Otherwise, fraternal, civic and other organizations, as well as grateful patients, may be more than glad to contribute the chassis. An attractive feature is that the OCD regulations permit the name of the donor to be painted on the chassis.

The securing of one or more of these ambulance bodies will enable hospitals to release patients more promptly. Since one of the important objectives of the OCD Emergency Medical Service, according to Dr. Keller, is to make available as many emergency beds as possible, requests for ambulances can be regarded as very real contributions to the war effort.

OCD officials point out that in times of large-scale disaster, such as the New York and Detroit race riots and the recent large railroad wrecks and fires, normal medicine facilities are inadequate to take care of casualties. These ambulance bodies, providing for four stretchers each, are designed to meet such emergency conditions.

The design of the ambulance body has been approved by the Corps of Engineers of the Army. The body can be easily mounted on the Chassis of 1939, 1940 or 1941 four-door model Fords, Chevrolets and Plymouths from which the rear part of the body behind the front seat has been removed.

The bodies have a number of unusual features, besides the space for four stretchers. Loading can be accomplished without climbing into the vehicles. There is enough room for an attendant to ride in the stretcher compartment, and he can communicate with the driver by means of a specially built window.

Hospital administrators and other medical practitioners interested in having these ambulance bodies made available for their use are urged to get in touch with Doctor Keller at the U. S. Office of Civilian Defense, Medical Science Building, Columbus, 8, Ohio. His telephone number is MAin 6371, Columbus.

ORATION IN MEDICINE

MEDICAL PROBLEMS IN KENTUCKY

Charles B. Stacy, M. D.
Pineville

As our Association adjourned its 1942 meeting, all of us felt a deep sense of responsibility and anxiety. Stalingrad was being crumbled in ruins, and the greatest threat to civilization was the Axis Army at El Alamein. A large number of our younger physicians were in the Armed Forces, and many more were being inducted. Those of us left in practice seriously doubted that we would be able to carry the load. The year has passed, and many of our doctors have fallen under the weight of that burden. In fact, the toll has been appalling. May we pause to pay tribute to the recent passing of Dr. A. T. McCormack, a truly great leader and one who left such a profound imprint upon the development and history of this Association. No task could have been more trying than the one he performed as Chief of the State Procurement and Assignment Service.

Today our mental attitude has changed, thanks to the victories of our Armed Forces scattered over the world. We are now thinking in terms of victory and the peace that follows. What is victory? Thomas Carlyle says, "Health alone is victory." As the final curtain is drawn on this, the greatest of wars, we will find that we are a long way from being victorious over the many diseases that shorten life and undermine the health of people. The physicians with the Armed Forces are young, and they will learn many lessons in prevention, control and treatment of disease that will greatly increase their ability to fight disease on the home front. Their experience in organizational work will be invaluable. Even our present medical literature has been changed greatly by the close contact of our trained forces with the many world wide medical problems. That medical education will be influenced is evidenced by the great program now being organized for training medical personnel by the Army and Navy. They have completely taken over medical education. To the candidates for approval, the examining boards for the medical specialties are giving certain credit for time spent in the various branches of the service. In a recent issue of the Journal of the American Medical Association, the effect of such problems on world wide health was ably discussed by men who are in a position to

Delivered before the Kentucky State Medical Association, Louisville, October 5, 6, 1943.

evaluate properly such vast influences.

The scope of this discussion is limited to the more definite problems of our own State. All national health programs of necessity affect our state problems, but we do have our own special problems which we alone can evaluate and solve. That we do have special medical problems to solve here in Kentucky is shown by the fact that our death rate from tuberculosis is over 50% higher than for the Nation as a whole. The rejection rate for Army Selectees was 27.8% for the Nation, but it was 34% for Kentucky. This represents an astounding defect in our youth. Just why such conditions should exist is a real problem for organized medicine, cooperating with the economic and educational programs of Kentucky. I did not say socialistic medicine. We are fighting this war to keep away from socialism. Surely, we are not going to be engulfed by it. Not one of us believes that the conception of Senator Robert F. Wagner, of New York or Senator James Murray, of Montana, as promulgated in Senate Bill 1161 is the solution to our problems here in Kentucky, and we will not support such systems. The exact solution of course, is difficult to plan; but we have been free of political influences in the past, and we hope to continue so.

The hospital program for Kentucky is a very interesting one, and it should interest every physician. After all, the hospital is only our work shop. People no longer fear entering a hospital when they are sick but expect it. Kentucky has 69 general hospitals with a bed capacity of 7,300 beds, that are registered with the American Medical Association. Slightly more than half of these beds are in the 52 small hospitals, that is, hospitals of 100 beds or less. Only five of these small institutions meet the requirements for approval by the American College of Surgeons. Every hospital in Kentucky with more than 100 beds is an approved institution. Since it is apparent that our hospital service is not up to par, then it is equally apparent where the greatest fault lies. Every type of public institution in Kentucky, such as hotels, restaurants and even barber shops, must meet certain state requirements, and they are inspected. Our hospitals, in many instances, are far from what they should be, and yet the State has no right whatever to regulate or demand improvement. Two years ago, a bill was introduced into our State Legislature to set up a minimum standard for our hospitals. Nothing but improvement could have resulted. Yet that bill was defeated because of lack of support by the profession. The legislative committee of this Association must be given more support in the future. The only reason for failure to support such a law is the fear of state medicine that seems to be instilled in so many of our minds, the fear of regimentation. Again, in 1926, a law was passed permitting licenses to be granted to undergraduates. Often this has been badly abused. Another failure to support our legislative committee. That law should be repealed. If we allow such conditions to continue, it will only invite governmental interference, the kind of interference we do not want. One of our post-war aims should be the standardization of every hospital in Kentucky according to the standards proposed by the American College of Surgeons or even higher.

Because of the faith that the public has in hospitals, overcrowding has become prevalent. Our larger hospitals in our few cities are not prepared to increase their load, so the smaller hospitals must continue to do as much as possible. We are convinced that this year will find the total number of patients admitted to hospitals in Kentucky greatly increased. In 1942, only 21.7% of births in Kentucky occurred in hospitals. Only two states had lower figures than Kentucky. In 1942, it was surprising to learn that for the United States as a whole 9.5% of the entire population was admitted to a hospital. In Kentucky, only 6% were admitted, again one of the lowest averages in the Nation. Although our institutions seem crowded, it is fair to assume that our average for the State will approach that of the Nation as a whole That will of necessity demand a great increase in our bed capacity in the post-war period. As for obstetrical cases admitted to the hospital, the aid given to wives of soldiers is a great impetus. The lack of physicians to do obstetrics in the home will greatly increase the number of hospital cases. It will be interesting to see the data for this year.

In 1932, a committee was appointed by the American Medical Association to study the problem of medical care in the rural communities. The report clearly sets forth the fact that the local hospital must be the center for the physicians in that community, and the standards of the hospital must be raised to the highest if proper medical care is to be extended to that great mass of people who are not accessible to the larger medical centers.

To contribute to the improvement of the small hospital, several factors are nec-

essary. First comes the whole hearted support of the profession which can be had only by complete cooperation of all members on the staff and all physicians in the community. In many instances these small hospitals are privately owned and are used as a means of forcing surgical cases to certain physicians. If the small hospital is used for selfish purposes, it is certain that complete cooperation rarely will be had. The hospital, in such cases, should be accessible to every physician to do the work that the staff knows that doctor is trained to do and will conscientiously do. Second, the medical profession of a small community should pool its equipment so that there is no useless duplication. In many small towns the duplication of equipment is very suggestive of lack of cooperation and a degree of inefficiency. Sometimes, there are five or six x-ray machines. Really the community could support no more than one good outfit. The same is true of laboratory facilities. All of this equipment should be purchased carefully with the idea of its being available to every physician in the community. It should be at the most accessible place, and that, in nearly every instance, is the local hospital. Money spent uselessly in this way is needed badly for the purchase of other equipment. Many times a small community has more than one hospital, offering competition and forcing poor service on the public through failure to pool equipment and personnel. Third, the hospital should be managed on a good business basis, always with one idea in mind, and that is to get all the equipment that the community really can afford. The needs of the community should be carefully studied. Careful observation of statistics shows that practically all of our larger, best managed and approved institutions are owned and controlled by various churches. It is probably the best example of practical religion. Almost all of our small hospitals are privately owned; and of course, they rarely get the support or the advantage of experienced management that the larger hospital enjoys. The hospital needs the support of every person in the community in order to render the best service.

During the last decade, hospital insurance has become very popular. It is estimated that 7% of the American people are covered by some form of hospital insurance. In Kentucky less than 3% of our people are protected by hospital insurance; however, I do not think this 3% includes the large number of people who enjoy some form of hospital insurance through our industrial organizations, such as the employees of coal mining companies in eastern Kentucky. There can be no doubt that such insurance does make hospitalization far more accessible to a large number of people. The effect of such insurance will eventually show in our mortality rates. Yet, as shown by the small number of policies issued, the people of Kentucky have been slow in giving their support to a measure that would so greatly contribute to early hospitalization and far better results for the patient. It is believed by many authorities that universal hospital insurance would solve a very difficult problem for our people.

It would be amiss, in speaking of the hospital situation in Kentucky, not to note the great improvement that has taken place in our mental institutions. For many years the care of the inmates of these institutions has been a disgrace to modern hospitalization. The authorities that have control of these institutions have taken pride in modernizing them, and it is hoped that by the end of this year, 80% of the inmates will be in clean, comfortable, modern quarters. These same authorities have given great assistance in obtaining added facilities and beds in our tuberculosis sanatoriums. That the tuberculosis problem will be one of great importance in the post-war picture none of us can doubt. The death rate from tuberculosis for the Nation in 1941 was 44.4 per 100,000. Kentucky lagged far behind with a rate of 68.2 per 100,000 or an increase of 50% over our national average. In eleven months in the year of 1942, 1,975 cases were rejected by the Army because of tuberculosis. This situation reaches its most critical aspects in the outlying rural sections. There is an isolated community in South Eastern Kentucky where the condition is alarming because of the large number of young people infected. To believe that no treatment is available does not seem possible. We were recently delighted to hear one of the best men in Kentucky discuss the subject. He filled his audience with a hope for recovery of these cases. Today, collapse therapy is paying big dividends in giving the early and moderately advanced tuberculous a real chance for a life of health. One of our candidates for Governor, in his opening address, gave as one of the "planks of his platform" the aim to help the tuberculous in Kentucky. This shows the interest the public has in the problem. Everything from the medical bills in Congress to the Gallup Poll indicates the great public awakening to our health needs. It is

estimated that 2,200 beds or more would be needed to care properly for the cases of tuberculosis in Kentucky. We have less than half this number in use or in sight. Most of the cases in the sanatoriums are from the small communities; therefore, hospital in the small community should be the place prepared to do the diagnosis and certainly must be prepared to carry on the simpler forms of collapse therapy for patients returning from the sanatorium. To diagnose these cases early is to take advantage of the simpler forms of collapse therapy with far greater expectancy of good results. The same condition is true regarding many of our other diseases. The physician in the rural sections must have the instruments with which to work, and the facilities can only be available to all if placed at the centrally located hospital.

To say that the civilian hospitals have been hard hit is to put it mildly, and the smaller hospitals have been scarcely able to remain open. In fact, many of our smaller institutions have been forced to close because of lack of personnel.

The nursing situation has been parallel to that of physicians. We do not think nursing standards have been too high, but certainly there have not been enough nurses. Neither have there been a sufficient number of technicians. The lack of properly trained personnel in our hospitals is a serious defect and is costing our people a great loss of lives. The war effort brought the acuteness of the condition to our attention. Maybe the solution to the problem will be the attempt by the public health service to recruit 100,000 young women into the field by the aid of the recent appropriation by Congress of $45,000,000. A few years ago the nursing profession, in an attempt to raise its standards, eliminated many of the small hospitals as training schools. Their ultimate goal was fine but even before the war there was a shortage of nurses. Today the demand for trained nurses is so critical that it is impossible to extend ideal medical service to the great mass of people who need it so badly. In the future, in trying to reach the ideals of medical service, we must not forget the practical side of it, that is, meeting the demands of the public both in the large centers and in the rural sections. To do anything less is to invite political interference and regimentation. The call to colors has attracted thousands of our nurses and technicians. That sense of patriotic responsibility is to be appreciated, but those who have so tirelessly accepted the duties of caring for our civilian hospitals will be remembered forever for their faithful performance of duty.

At this time, let us study some of the problems that concern the physician himself. Because of the extreme shortage of physicians in private practice, the strain on human economy has been and will continue to be exceedingly severe until our fellow physicians in the service return. We cannot hope to get replacements through graduation. Just how this period of over work is affecting us is definitely shown by the registry of deaths published in the American Medical Association Journal each year. Our average age at death in 1941 was 65.9 years. In 1942, the first year of war, this average dropped to 65 years, a loss of about one year. In 1943, a far more strenuous year, I predict an average at death of 63 years. In most other professions, the older men have not been forced into active duty. The need for more practitioners has been so urgent that many physicians have disregarded their limited reserves and are trying to meet the demand. They personally feel responsible for the care of people among whom they have always practiced. Often the effect has been fatal. The deaths due to heart disease have risen sharply in the last few years until at this time, the cardio vascular deaths account for more than 50% of the total, with coronary disease leading the list by far. One year ago one of our pathologists gave a rather enlightening discussion on the pathology of coronary disease. Irrespective of the microscopic changes, we all know that chronic exhaustion, due to long hours of duty, is the prime factor. Even in normal times, there has been a shortage of physicians, at least in the rural sections. We do have a large number of physicians scattered throughout the rural sections, but it is amazing to find that by far the greatest number are at an age when really active practice is impossible. It is estimated that at 60 the physician is only 50% efficient, and the efficiency sharply declines after that. If, as a rule, the doctor exceeds that, he merely decreases his life expectancy. About 1910, there was a sharp increase in the standards of medical education. Before that here in Louisville, the graduating classes were several times the size of the present ones. The large group of physicians graduating before that period cannot hope to enter strongly in competitive practice, but they can best serve in protected positions as is being done in several instances here in our State. At present, there are about 2,542 doctors registered in Kentucky with 639 be-

ing in the service. What will be the attitude of our men in private practice when these physicians return? In England, every doctor who enters service is assured a certain percentage of his normal income plus the assurance that all of his patients will be returned to him as he re-enters practice. Our physicians should have the same courtesies extended to them and an unselfish feeling of loyalty and assistance in resuming practice. A similar plan has been worked out among our own local group for the ones in service. The returning physician must not and I am sure will not feel that he is our competitor, but rather that he is a badly needed and highly welcomed associate.

When Pearl Harbor was bombed, only 3,000 physicians were in the service. In March, 1943, Dr. Frank Lahey, Chairman, Directing Board, Procurement and Assignment Service, announced that 43,000 men enlisted as of January 1, 1943, and that 11,500 must be obtained by the end of this year, every available man under 45 years of age. After peace is declared, many will remain in our standing armies, and the armies of occupation. That our civilian population has been denied luxurious peacetime medical service during this war no one can doubt, but, in general, the people have realized the shortage and have been very patient. If we hope to maintain our present system of practice and not be engulfed in some socialized system of regimentation, we must realize the inadequacies that now exist. Our aim should be a perfect medical service to our entire population. Since the Army and Navy have taken over medical education, there is an increase in the number of graduates estimated at 1,000 per year. It is also to be hoped that more emphasis will be placed on post graduate education. A surprisingly large number of our physicians have failed to take advantage of it. It probably should be compulsory. With the Government financing the program, it is reasonable to expect a continued increase in the number of physicians. We do hope for a sufficient number to insure good medical care even to our rural sections, but we must guard against such conditions as in Russia, where after the other war, the incomes were so small that the best men did not enter into medical practice, the profession being largely taken over by women.

The history of Medicine is replete with the accomplishments of individuals. Kentucky has had its share of such men—Ephraim McDowell, Walter Brashear, and others. Our future problems will be solved by organized medicine, not regimentation. Such problems as we have need government aid, not government control. In the past, such problems as diphtheria, small pox, and typhoid were controlled by aid of organized medicine, mass inoculations by organized groups such as health units, generally being offered free at the expense of the State and National Governments. The most recent extension of governmental attempts to solve mass problems have been in the almost universal adoption of premarital and prenatal laws. Recently the Federal Government has been extending aid to wives and families of soldiers. This is a patriotic move. None of these moves has as its aim the control of private practice, but to aid and supplement our present system. By the premarital laws, many of our laboratories have been standardized, and certainly their efficiency is increased. By such methods many of our problems may be in a large measure solved.

The average length of life is now 65 years. Dr. Morris Fishbein, in discussing this, stated, "What is needed in order to make more people live to 75 years of age is still further improvement in dissemination of the knowledge now available to scientific medicine." Making this knowledge available and applicable to every individual in every community in Kentucky is our real problem. Government aid will be needed. In solving this problem, it is hoped that every physician will give his whole hearted support.

The continued good health of our people is our task. We seriously doubt the present trend toward the socialization of medicine. We do believe it is the bounden duty of the profession of Kentucky to keep free of political control.

In the three years following the last war more people died from famine and preventable disease than were killed in the war itself, hence the importance attached to the present organization of post-war relief. The principal regional medical officer, British Ministry of Health, holds that the lives and health of millions in Europe as well as the physique and welfare of a generation to come depend on how well this preparatory work is done. He visualizes four principal problems—the provision of food, the supply of medical necessities, the control of such diseases as typhus, malaria, tuberculosis, and dysentery, and the reestablishment of the medical, hospital, and public health services in each country. Ed. Jour. Royal Inst. Pub. Health & Hyg., March 1943.

ORATION IN SURGERY

WHERE TO, SURGERY?

B. Wilson Smock, M. D.
Louisville

Where to, surgery? Doctors, I challenge you, Where to, Surgery? This question is the most important one confronting the medical profession today. It is one that must be answered by our profession in the immediate future or it will be answered by other groups not qualified to do so.

For the past six or seven years, whenever two or more doctors have gotten together, the subject of conversation has always been, Is socialized medicine under government or this or that agency coming?

We need to face frankly the fact that there are some things which seem to indicate that it is coming. First of all, it is being talked. Magazines and newspapers frequently carry articles. It becomes a subject for discussion in forums and clubs and civic groups. There appears to be a growing conviction throughout the country that something must be done to make it possible for all people to have adequate medical care. So much talk upon any given subject is sure ultimately to have some effect. Second, certain experiments are being made in certain localities, which move in the direction of socialized medicine, if not altogether approximating it. At Trinity Hospital in Little Rock, Arkansas, a group of doctors have worked out a plan of group medical and surgical care which has attracted nationwide attention, and which includes, at last report, 5,000 subscribers. According to the Readers Digest, some 30 cities in the United States now have some form of community medical service controlled by doctors. About sixty cities have prepayment plans providing for hospital service only. In the Pacific Northwest country medical societies are organizing plans for comprehensive medical care for all the people at a fixed annual price. Third, attention is being given in certain quarters to the formulation of laws and the setting up of agencies which would bring finally the era of socialized medicine. As yet many of these plans are only in the process of germination, but unless the situation that gives rise to them is faced by those best qualified to face it, the chances are that the day will come when they will come to full birth.

When we behold the possibility of socialized medicine upon the horizon our tendency is to blame the politicians, the social workers, the idealists and dreamers and the enemies of private enterprise. You have never heard any doctor suggest where I think the blame is to be placed. It is my opinion that we plain, everyday, practicing doctors are to blame, and that the remedying of this situation lies with us. I beg your indulgence while I develop the cause of all the unrest, and ask you then to follow me as I suggest my humble plan for its correction.

Let us first take a brief glance at history: Surgical aid for our suffering fellowmen has, since the beginning of time, been one of man's noblest callings. By primitive man the practitioner of the Healing Art was worshipped to the point of often being regarded as divine. We have many proofs in the specimens uncovered by the archeologist, that surgery was accomplished by men of the Stone Age. It is an accepted fact that these early predecessors of ours did attempt orthopedic surgery; did open the skull and did amputate the extremities. There is no permanent record of any attempt to treat soft tissue, but it is reasonable to presume that men courageous enough to cut a whole in the skull or amputate an extremity would be sufficiently strong and brave enough to treat soft tissue changes—such as wounds, foreign bodies and possibly objective tumors. There must have been a number of such doctors in these early years of human life. In fact, there must have been usually a doctor to each clan or tribe, because all of the ruins of former civilizations, no matter in which hemisphere they were uncovered, show evidence of primitive surgery. I feel that this proves beyond the shadow of a doubt that there was an adequate number of surgeons, such as they were, to administer to all the people.

The early history of surgery, recorded for posterity in our literature, is known to all of us. It shows us that in those early days there were sufficient practitioners for all people needing it to have attention, even though the surgeons were untrained and inefficient, judged by our standards.

Throughout the years, there was gradual improvement and addition to our store of knowledge, until the era of America's discovery, when surgery began to grow by leaps and bounds; and it is most gratifying to all of us Americans to realize that our own early surgeons added much to our present scientific information.

And we Kentuckians swell with pride when we recall that two Kentucky doctors made outstanding contributions to the sur-

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gery of the future—Dr. Ephraim McDowell, with his first successful ovariotomy, and Dr. Brashear, the first to do a hip-joint amputation. The work of these two men is outstanding; however, their contemporaries were also giving of themselves and their talents to the citizenship of Kentucky. During those days there was never a question of the adequacy of surgical care or the ability of people to obtain it.

From this period of surgery, we moved into the latter part of the 19th and early part of the 20th Century, with its age of Antiseptic and Aseptic Surgery, its increase in medical education, its improvement in hospitals, its system of individually surgeon-trained surgeons and legal registration of doctors under the Medical Practice Act. This period of surgery gave us the greatest forward step of any previous or subsequent period and presented the surgical world with its most renowned and legendary physicians. What similar period produced such individualists and accomplished surgeons as John B. Murphy, William Keene, William and Charles Mayo, Bevin, Halstead, Matas, William Dugan, John Finney and many others? All of these men were teachers of renown, both clinically and didactically. They personally trained many surgeons who are practicing today. During these early years they taught without salary for the love of teaching and gave to medical education the keystone of its arch of knowledge.

Now what has been the purpose of this brief glance at the long years of medical and surgical history? Simply to remind us that, in every age in the past, such surgical care as was known was available to the people. But today, despite all the improvements which the years have brought, such surgical care as we now know is not available to all of the people. The demand for socialized medicine roots in the desire to have adequate medical and surgical care. Now what are the facts? What about our great cities, with their great hospitals and their companies of well trained physicians? The facts seem to be that in our city centers the very rich, and the very poor who are dependent upon public funds, receive adequate care, whereas the great middle class, with hospitals and doctors available, suffer because of prohibitive costs. In our small towns and rural areas the situation is still more serious. There are communities of considerable size in our own State which are without the services of a physician of any kind, much less the services of a surgeon. There are many more communities where a small number of doctors are overworked and overtaxed. An article in August's "Ladies Home Journal" tells about the situation in Sault Ste. Marie where seven doctors are forced to serve a community of 40,000 people scattered over an area of 1500 square miles. This means one doctor to every 5700 people, whereas the safe ratio, according to accepted medical practice, is one doctor to every 1500 people. This overtaxed doctor situation traces, in part at present, to the war situation, but not altogether. Before the war there were numerous communities which did not have a sufficient number of practitioners. As long as this situation obtains we will continue to have to face the demand for socialized medicine. We are told that approximately 1,300,000 people die annually in the United States. A medical economist says "About 700,000 of these die of diseases peculiar to those past middle life. Many of these are preventable. Of the remaining 600,000 we might say that almost all are preventable by proper medical care." As long as thousands of people die annually for the want of proper medical and surgical care we may expect to hear the demand for socialized medicine. The question is, "What can we do about it?"

My suggestion is that we have built an improved system of medical education which has probably reached too far into the idealistic with the development of present high scholastic and medical requirements for graduation. Unfortunately these requirements have become so demanding and expensive that many of us now practicing, if we were in school again, would not be able to qualify for lack of financial backing.

The course of premedical and medical training has now been increased to four years of college and four years of medical school, which makes an aggregate of eight years after graduation from High School. Taking the average High School age of graduation as eighteen and adding eight years, we have a man twenty-six years of age at graduation from Medical School. The faculty requirements for teaching have been so heavy that most of the teaching is now done by full-time men who are not allowed to do any outside surgery, and are thus limited to the viewpoint of the clinic surgeon and not the broader view of the man reaching out for work. The present-day medical student has lost a great deal in not meeting and being lectured to and watching the clinic efforts of these active practitioners of surgery. How many of us present today do not look back on our school days with fond memories of

our association with these accomplished surgeons? How many debates have we had with our schoolmates over the relative abilities of our respective heroes? This is absent from the present-day setup and the professors are held in respect by the pupils, but not admired and respected like our heroes of old.

The fees and tuition of medical school have increased to the point where they are prohibitive for a large number of deserving boys, thus making of medicine a profession for the few financial fortunates and not a democratic institution open to all.

In more recent years requirements for postgraduate work have been increased to the point where five to seven years more are required for a young man to qualify for surgery. This, plus his twenty-six years of age at graduation, adds up to thirty-one to thirty-three years of age when he is ready to practice his profession and start his earning life. If he should lose one or two years, he would be correspondingly older. Then, add to this five years to establish himself in a practice, and you have a man thirty-eight to forty years of age before he begins the active phase of his life. Taking insurance experience as to expectancy of life, we find they place the average age of life at fifty-four to sixty years. This leaves a man thusly trained from sixteen to eighteen years of active work. It strikes me this is poor economics. I understand that this tendency to lift the educational requirements and to demand that all men be highly trained specialists is creating problems in other fields also, particularly in the teaching profession and the ministry.

There is no doubt that the hue and cry for social medicine, which came up long before the war, was due entirely to a shortage of medical men, especially in rural districts. What man would choose and could afford to go to a rural community after spending from ten to fifteen years of his life in training—usually in the city with all of its conveniences? What man would want to return to an isolated community and do surgery in the home and his office when he can stay in the larger centers with their medical conveniences? Many of our surgeons in the past did a large amount of successful surgery in the home. I know Dr. Abell and Dr. Sherrill have, and I remember, as a boy, watching my father remove a stone from the urinary bladder in the yard of our home in the country. This work has been done in the past and there is need for it today; however, a lot of our small towns now have excellent hospitals and competent men to do the surgery. As an example, I would like to mention the towns of Greenville, Harlan, Lynch, Glasgow, Bowling Green, etc.

Gentlemen, we have built too well and reached too far into the idealistic and our house is about to be pulled in upon us. We must rethink the whole matter of training for medicine and particularly surgery.

Now what is to be done about the future of surgery if we are to halt the trend toward socialized medicine?

First, we must make it possible for all people to be able to obtain surgical care, whether they live in a rural community or in a large metropolitan area. This we can do by making provision for men to obtain a medical education sufficient to practice surgery in a satisfactory manner without trying to make of all medical students superscientific regimented specialists.

The economics of our present system must be changed so that a man will not spend thirty-five to forty years of life training for an active life of fifteen to twenty years.

I would advocate a change in medical education which would include admitting High School graduates to medical school where they would start upon a five year medical course (similar to that followed by Edinburg University) and upon the completion of this five year course, requiring a two year rotating internship before licensing, then requiring five years in active practice before returning to hospitals for resident experience in surgery or other specialties. This plan would provide all communities with adequate medical care and allow students of medicine time to decide which field of medicine they would best fit into, and thus let the specialty pick the man rather than the man choose the specialty.

We should also make an effort to increase the enrollment in medical schools and, possibly, build more schools. If necessary, we should establish a State subsidy for the education of deserving boys financially unable to provide medical schooling for themselves. These boys could repay their Government by serving in rural communities. If our Government pays for the education of our boys at West Point and Annapolis, to be professional warriors, we certainly should pay to educate boys to save people.

Where to, Surgery? What is our answer, gentlemen, to this challenge to our profession, shall we accept the challenge of America and initiate the proper surgical

treatment to remedy this cancer which is destroying our profession or shall we leave it in the hands of the quacks to try their patent remedies?

I beg of you, rally to the cause and initiate the proper treatment today—Not Tomorrow!

ROCKY MOUNTAIN SPOTTED FEVER

Case Report

Frank M. Stites, M. D.
Louisville

H. E. S. male, age 67, was seen by me at St. Joseph Infirmary on August 16, 1943 in a state of coma. He had been sent to the hospital by his family physician, Dr. Mason, from whom I secured the following history: He was a farm laborer working from place to place but most of this summer had been caring for a large herd of cattle on an adjoining farm. He had been in good health until August 5th, on which day he came home complaining of severe headache, followed by chill and high temperature with considerable prostration. Temperature reached 104°, there was profuse diaphoresis. The next morning he was up for breakfast and around the house all day not feeling well enough to attend his usual duties. He did not remain in bed until August 10th, when he was complaining of being quite ill and remained in bed. He stated he was unable to lift his head from the pillow and in a few hours became delirious and recognized no one. This delirium was not continuous but irregular for the next several days. However, on the 16th, the coma became more marked and the patient was brought to the hospital at which time I examined him.

He was a fairly well preserved but somewhat undernourished male, with flushed face, somewhat stertorous breathing, dry furred tongue, fixed pupils, rigid neck, temperature 101, pulse 120, respiration 24 and a discrete rash rather macular in type, over his ankles and wrists. Red Blood Count 4,370,000, White Blood Count 23,200, 92% Polymorphonuclear. Urinalysis showed a trace of albumin, concentration of 1030, blood pressure 135/60. Spinal tap was done revealing 180 m.m. 5 cells, sugar and protein negative. Agglutination tests were ordered and the only other information obtained from his wife who stated that his principal recreation for many weeks had been picking ticks from several dogs he owned, and that previous to his illness there was an area evidently a bite on the back of his left hand. She did not recall whether a tick had been extracted from this area or not.

The laboratory agglutination, Proteus X was positive and intravenous fluids and glucose were given. The vaccine was administered but the patient showed no improvement and in 48 hours ceased to breathe.

Considerable could be said along a differential line but I am purposely avoiding any reports that might infringe on the paper that is to follow. Looking forward to some discussion of Dr. Caudill's paper.

Differential Diagnosis

1. Typhus—may be clinically indistinguishable.
2. Follows flea bite
3. Occurs late Summer and Fall.
4. Rash appears late, first on chest and abdomen.
5. Measles and cerebral meningitis.

Read before the Jefferson County Medical Society, September 20, 1943.

ROCKY MOUNTAIN SPOTTED FEVER IN KENTUCKY

F. W. Caudill, M. D.
Louisville

Cases of the two most important of the richettsioses—typhus and Rocky Mountain spotted fever—have been reported in Kentucky. Only 5 cases of typhus, from 5 different and widely separated counties, have been reported. The first of these was reported in 1933, and the last in August, 1943. Rocky Mountain spotted fever, on the other hand, has been much more widely prevalent in the State, 43 cases having been reported since it was first recognized in 1934. These have come from 23 different counties, scattered widely over the entire length and breadth of the State. It is felt that Rocky Mountain spotted fever is the more important because of its high fatality and wider prevalence. Therefore, it will be made the subject of this discussion.

The specific name of the rickettsia causing Rocky Mountain spotted fever is dermacentroxenus rickettsii. Three ticks have been proven to be transmitters of this organism and at least 5 others are known to be potentially capable of transmitting it in nature. The 3 proven carriers of the infection are the Rocky Mountain wood tick, Dermacentor andersoni; the American dog tick, Dermacentor variabilis; and the rabbit tick, Hemaphysalis leporis—Palustris.

Of these 3 proven carriers, the Rocky Mountain wood tick is found throughout

Read before the Jefferson County Medical Society, September 20, 1943.

the Rocky Mountain region, extending from North and South Dakota and Nebraska, westward to the eastern portions of the Pacific Coast States. The American dog tick is widely distributed throughout the central and eastern states and is found in the westernmost portion of California and southwest Oregon. East of the Rocky Mountains this tick overlaps somewhat the area of prevalence of the Rocky Mountain wood tick. The rabbit tick has the widest range of the three. This tick occurs essentially throughout the United States and extends southward into South America and northward into Canada and central Alaska.

Of the 3 ticks, the Rocky Mountain wood tick and the American dog tick feed on man as well as lower animals, while the rabbit tick feeds only on various species of rabbits and some ground frequenting birds. Both the American dog tick and the rabbit tick are found in Kentucky, but since the rabbit tick does not feed on man, this leaves the dog tick as the only presently known tick that transmits Rocky Mountain spotted fever to man in this State.

A detailed description of the anatomy and color pattern of this tick is not considered within the scope of this paper. Suffice it to say it is the same small brown tick which may be found, in large numbers, on dogs in the spring and summer. This tick has been found feeding on practically every type of animal native to Kentucky, from such domestic animals as horses, cattle, mules, sheep and hogs to such wild animals as rabbits, squirrels, foxes, skunks, oppossums, rats and even the lowly field mouse. Its favorite host, however, is the dog. There is a distinct tendency for the smaller, immature forms of this tick to feed on smaller animals, while the larger adult form of the tick feeds on larger animals. It is the adult form which, for the most part, attacks man. While there is good reason to believe that the immature forms may get on man, it is felt that this seldom occurs.

While knowledge concerning the biology and life cycle of the dog tick is less complete than that of the Rocky Mountain wood tick, what is known is essentially the same as what is known of the wood tick. It is, therefore, felt that the life cycles of the two are very similar or perhaps identical.

There are four stages of the life cycle of the dog tick; the egg, the larvae, the nymph and the adult. About the middle of the summer, small six legged larvae hatch from a pile of eggs, climb nearby grass and other small vegetation, from which they attach themselves to small animals, such as ground squirrels, rabbits and mice. These larvae engorge for about a week, then drop to the ground where they molt into the second or nymphal stage. This nymph is several times larger than the larvae and has 8 legs, instead of 6. It finds its way under ground, where it remains in hiding during the rest of the summer and through the winter. In the spring, like the larvae, it crawls up nearby vegetation and waits for a small animal on which to feed. After feeding, it drops to the ground and molts over a period of about 3 weeks, emerging as an adult. It is usually late in the second summer before the adults mature, so they go into hiding under rocks, logs or roots for another winter. As soon as warm weather appears in the spring, the adults emerge, climb up vegetation, such as weeds and low bushes, preferably along side trails and paths, where they await to attach themselves to larger animals, preferably dogs. Copulation of the male and female takes place on the host animal. The female then feeds for a period of about 9 days, and engorges to many times her original size, after which she drops to the ground and crawls to a safe place under cover. Here she deposits about 300 eggs a day until a total of approximately 6,000 eggs are deposited. She soon dies thereafter and the eggs incubate for a period of about 35 days, hatch into new larvae and a new generation is started. The entire life cycle covers a period of about 2 years.

Of the animals on which the dog tick is known to feed, dogs, sheep, rabbits, and perhaps others, are known to be mildly susceptible to Rocky Mountain spotted fever and so are likely to have the disease in a mild unrecognizable form but yet are infectious for the tick. If such an infected animal were brought into an uninfected area where dog ticks were abundant, it is easy to see how such ticks would become infected by feeding upon them. The female tick may become infected directly from the animal, or such infection may be transmitted from the animal to the male tick which may in turn, transmit it to the female tick through copulation. Once the female tick is infected, she may transmit the virus to her eggs from which infected larvae will hatch. These will transmit it to the nymphs which, in turn, transmit it to the adult ticks. As these mature ticks bite and infect other animals and these animals, in turn, serve as succor for other ticks, it is easy to see how the infection is kept going

in both animals and ticks. Among the animals that may be bitten by an infected tick is, of course, man, who in comparison to lower animals, is infrequently bitten, and yet, by chance alone, is occasionally bitten by an infected tick, whence his disease arises.

It is not entirely clear where the main reservoir of the infection is maintained in nature. However, existing knowledge tends to implicate the rabbit. It is known that the rabbit tick carries an extremely mild type of the organism which, when tested on laboratory animals, produces, for the most part, inapparent disease, although it immunizes the animals. These ticks feed only on various species of rabbits and certain ground frequenting birds. They must, therefore, receive the virus from and transmit it to these birds and rabbits. The infection probably does not produce apparent disease in either the birds or rabbits. In addition to the rabbit tick, however, both the Rocky Mountain wood tick and the American dog tick feed on rabbits. Hence, the rabbit tick would transmit the virus from rabbit to rabbit, but not to other lower animals or to man. However, the dog tick or wood tick could receive the infection from rabbits and transmit it to other lower animals and man. Hence, the rabbit may be the main animal reservoir that maintains the infection in nature.

The usual way that infection takes place is through the bite of a tick. Another way that infection is believed to take place is by contamination of the skin with tick feces or by crushing a tick when removing it from attachment, the organism, in either instance, gaining entrance through inapparent abrasions. There is no characteristic lesion at the point of inoculation. However, there may be a slight enduration and enlargement of the regional lymph glands around the site of a bite.

The general belief prevails that Rocky Mountain spotted fever in the eastern and central States is a result of spread from the Rocky Mountain region. While there is ample evidence of spread of both the Rocky Mountain wood tick and the virus, within the range of this tick, there is no evidence that the range of this tick itself has increased or changed to any appreciable extent. There is no evidence that it has been carried on live stock eastward, where new ranges of the parasite have been established. Further, if infected livestock brought the virus from west to east, it is very likely that a trail of human cases would have followed the railroad routes over which this livestock were shipped. This has not been the case. Finally, if the disease spread eastward from the Rocky Mountain area, where it was first recognized, it seems odd that the greatest focus of infection should have been in the easternmost States of Maryland, Virginia and North Carolina, instead of in some of the midwestern states close to the original focus.

It is now felt entirely probable that Rocky Mountain spotted fever has been endemic in the eastern and central states fully as long as in the Rocky Mountain region. It is further felt that it was first recognized in the Rocky Mountain region because of its high fatality in restricted areas there.

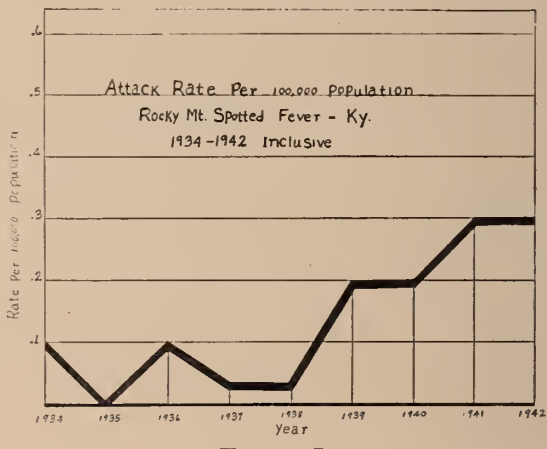


FIGURE I

Since the first case was recognized in Kentucky, in a 4 year old white female, in Jefferson County, near Middletown, in May, 1934, a total of 43 cases have been officially reported to the State Department of Health. These 43 cases have been from 23 separate counties, scattered widely in the State, the greatest concentration being in a triangular area bounded by a line drawn from Campbell south to Fayette County, west to Jefferson and northeast back to Campbell again. Of the 23 counties from which cases have been reported, 7 have reported cases for 2 or more years, the subsequent cases, almost invariably coming from the same general vicinity of the original case, indicating continuing foci of infection.

Since the disease was first recognized the annual case rate has shown a definite upward trend over the 9 year period 1934 through 1942. Whether this increase in incidence has been due to actual increase in the disease or is a result of better recognition, is not entirely clear.

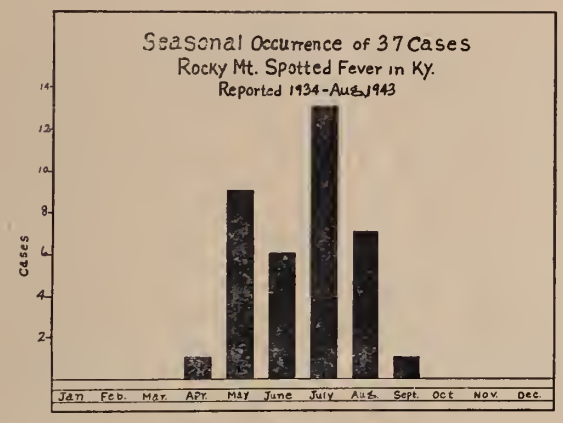


FIGURE II

Of the 43 reported cases, dates of onset were given in 37. When these 37 cases were tabulated according to dates of onset, it was found that onsets had taken place during the months of April, May, June, July, August and September, with the largest number in July and the next largest number in May. Thus the seasonal incidence of the disease in Kentucky differs slightly from that in the United States as a whole in which the peak months are May and June, but is identical with the seasonal occurrence of the disease in the Atlantic states in which the peak month is July. Hence, the disease is entirely a spring and summer disease.



Counties from which cases of Rocky Mt. Spotted Fever have been reported 1934 - Aug., 1943

FIGURE III

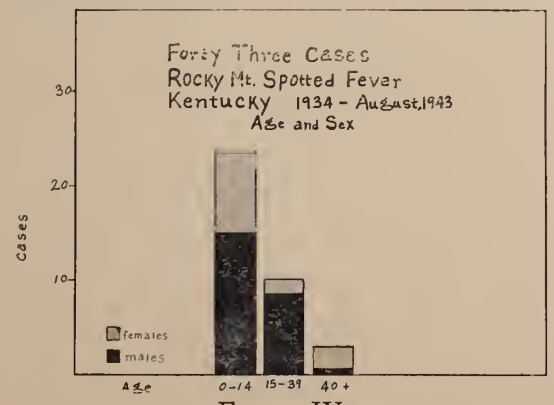


FIGURE IV

All 43 cases recorded were white. Twenty-three were males and 20 females. Twenty-seven, or 63 percent, were children under 15 years of age; 10, or 23 percent, were young adults 15 to 40 years of age; and 6, or 14 percent, were persons who were 40 years of age or older. Of the 27 children, 15 were males and 12 were females; of the 10 young adults, 7 were males and 3 were females; of the 6 older persons, 1 was a male and 5 were females. These figures, although small, indicate that in Kentucky Rocky Mountain spotted fever is a disease of whites, chiefly children, and mostly of males both in childhood and the young adult years.

Detailed epidemiological and clinical case records were obtained on 37 of the 43 cases. Twenty-five of these 37 recorded cases gave a definite history of tick bite, and 20 of these 25 cases gave both the dates that the ticks were detached and the dates of onset of symptoms. The period between tick bite and onset of symptoms in these 20 cases ranged from 1 to 14 days, a mode of 3 to 5 days, which corresponds with the incubation period for severe infections usually given in the literature.

All 37 of the cases gave definite dates of onset and all had a rash. However, only 34 of the 37 cases could give definite dates as to when the rash was first noticed. Of the 34 who could give both the dates of onset and the dates of first appearance of the rash, the periods between these two events ranged from 1 to 13 days, with a mode of 3 to 4 days.

Twenty of the 37 cases indicated the locations where the rash was first noticed. Of the 20, 16 first noticed the rash on the forearms and legs. The other 4 first noticed it on the trunk or neck.

Of the 37 cases, 12 died, giving a fatality of 32.4 percent. There was no significant difference between the fatality among those under 15 years of age and those over 15 years. This fatality rate is about one-third higher than that for the south Atlantic States as a group, or the Rocky Mountain and Pacific Coast States as a group.

The best way to prevent the disease would be, of course, to stay out of infected areas. This, however, would seem next to impossible, when it is realized that recognition of human cases is occurring almost annually in new hitherto uninfected areas.

Probably the most practicable method of prevention lies in measures designed to prevent tick bite. First in importance in the prevention of tick bite would be to wear protective clothing that would prevent ticks from reaching the skin. The best

clothing for either men or women would be a shirt and trousers or preferably a one piece cover suit, made of hard surfaced material, on which ticks would have difficulty catching. With this clothing should be worn boots, leggings, puttees or even sox over the bottom of the trousers. This would make it necessary for the ticks to crawl practically the entire length of the body in order to attach themselves to the skin at the neck, and thereby afford greater opportunity for discovery before they gained attachment.

In addition to wearing such protective clothing, it would be wise to feel closely around the neck and hairline for ticks at least twice a day. And at the end of the day, all clothing should be removed and the entire body examined for the presence of ticks. It is especially important that the clothes of children who play in wooded and uncleared areas be removed at the end of each day and the entire body examined for ticks. It should be remembered that when the clothing is removed it should be so disposed of that any ticks which it may contain will not be a hazard to other members of the family. The importance of the early removal of ticks is more clearly realized when it is pointed out that a tick must feed for several hours before the virus which it carries becomes sufficiently activated to be invasive. Hence, early removal of attached ticks lessens, very appreciably, the chance of contracting Rocky Mountain spotted fever.

A further measure for the prevention of tick bite would be to remember that ticks are prone to congregate on grass, weeds and other vegetation along paths and infrequently used trails to wait for a desirable host. Such paths and trails should be avoided.

There is no known chemical repellent which, when put on the skin or clothing, will prevent tick invasion.

The quickest and simplest way to remove attached ticks is gently to pull them loose with the fingers. It is desirable, however, if paper, cloth, gauze or other protective material is at hand, to place it between the tick and fingers to prevent contamination with infectious material in case the tick is crushed in the removal. This is particularly desirable when ticks, many of which will be highly engorged, are being removed from dogs or other domestic animals. There is little danger that the mouth parts of the ticks which transmit Rocky Mountain spotted fever will be left in the wound, general belief to the contrary notwithstanding.

Immediately after removal, the site of the bite should be cauterized with a silver nitrate stick, or painted thoroughly with an aseptic agent such as tincture of iodine or tincture of metaphen. In removing ticks from persons, dogs or other animals, the skin should be thoroughly disinfected with alcohol if and when the skin becomes contaminated from crushing.

The vaccine now in use for active immunization against Rocky Mountain spotted fever is made from the tissues of infected Rocky Mountain wood ticks. It is prepared in the Rocky Mountain Laboratory of the U. S. Public Health Service, located at Hamilton, Montana. It is also now available commercially. Such of this material as has been furnished to the State Department of Health of Kentucky has come free upon request from the Rocky Mountain Laboratory and has been administered, for the most part, to immediate families and neighbors of diagnosed cases, on the ground that they were living in the immediate vicinity of infected ticks. Some has been administered to persons anticipating exposure to tick bites, such as boy and girl scouts; some has been administered to persons anticipating camping and fishing trips into areas where cases have been discovered, and some has been administered to farmers and their families who live in neighborhoods where ticks are known to be plentiful. A wide immunization program, using this vaccine, has not been inaugurated in the State because of the very low incidence of Rocky Mountain spotted fever as compared to some of the other infectious diseases against which immunity can be conferred.

The vaccine is given in 2 doses of 2 cc each subcutaneously or intramuscularly, at 5 to 7 day intervals. This amount has been felt to be sufficient to protect the average individual against the type of infection which may be contracted in Kentucky. However, if an individual is anticipating a trip into an area where the disease is highly fatal, such as western Montana, then it would be advisable to give 3 - 2 cc doses at 5 to 7 day intervals. Children under 10 should be given one-half the adult dose.

Both the degree and duration of the immunity conferred vary widely. The existing evidence indicates that complete or almost complete immunity is conferred against infections with the milder strains and that the protection conferred is sufficient to ameliorate symptoms even in the more fatal strains. The duration of the immunity, in most instances, is one season

and, at most, somewhat less than one year. However, a considerable percentage of those inoculated carry some immunity over into the second year. Those who have 2 or more annual immunizations seem to acquire an immunity, the duration and degree of which are somewhat greater than if they had only one immunization.

The time to administer the vaccine in Kentucky would be during the months of February and March, before the ticks begin to emerge in April. Those anticipating exposure to ticks should complete their inoculations at least 10 days before expected exposure.

The vaccine has not been shown to be of any value in the treatment of the disease after onset. However, single injections with the vaccine have been given immediately after tick bites and felt to have some value in ameliorating symptoms, particularly in infections with milder strains and in persons who have been previously vaccinated.

Reactions are, for the most part, local, with redness, swelling and itching. However, an occasional individual will get a constitutional reaction with headache, malaise and slight fever. Rarely, of course, an anaphylactic reaction may arise.

Although the scope of this paper precludes a detailed discussion of the treatment of Rocky Mountain spotted fever, it is felt that a summary of the serum treatment of the disease is not out of place. As far back as 1908, attempts were made to produce an immune serum that would have value in the treatment of this disease. Since that time other attempts by different workers have been made and, although all the sera produced, even though crude, had neutralizing value, none was used in the treatment of human cases.

About 1940, a serum was developed that was found to prevent the disease and ameliorate symptoms when given to infected guinea pigs and monkeys. It was found that the earlier this serum was administered after inoculating the animals with the virus, the better the results and that modification of the disease took place even when the serum was given after the disease began to manifest itself. This serum was produced by inoculating rabbits with infected Rocky Mountain wood tick material and also by inoculating rabbits with highly infectious yolk sac material. The rabbit serum thus obtained was refined in the same way that antipneumococcus serum is refined.

In 1941 and 1942, this refined immune rabbit serum was first used in the treatment of human cases, with results reported in May, 1943.

During these two years, 71 cases of what was considered, beyond reasonable doubt, to be Rocky Mountain spotted fever were treated with this serum and its influence on the fatality rate studied. To 52 of these 71 cases a dose approximating the recommended dosage was administered on or before the third day of the rash. The fatality rate among these 52 was significantly lower than that expected among an equal number of untreated cases. The fatality in the treated group was 3.8 percent, as contrasted with 18.8 percent in the untreated group.

Because of the possibility of greater danger to the patient of such experimental serum, when administered intravenously, it was given to these patients intramuscularly. The amount recommended was approximately 1 cc per kilogram of body weight. The amounts actually given varied between 20 and 60 cc, a mode of 40 cc.

The results obtained in the group of 52 cases to whom the serum was given early, suggest that anti-Rocky Mountain fever serum has therapeutic value. However, a more definite appraisal of its value must await study of additional treated cases.

DISCUSSION

Oscar Bloch, Jr.: How long does a positive agglutination condition exist after recovery?

F. W. Caudill: The agglutination titre of proteus X strains falls rapidly after recovery being completely gone after 6 to 8 months. Rarely does the patient give a positive agglutination after the first year.

Oscar Bloch, Jr.: Following inoculation against Rocky Mountain spotted fever, is it ever observed that the agglutination titre increases for typhoid bacilli as it does for the proteus strains?

F. W. Caudill: I am not clear about this. It has been shown, however, that the serum of typhus patients will agglutinate a variety of non-typhus organisms, beside the proteus X, among these being Brucella melitensis and abortus, which cause undulant fever. I can see how it would be likely that the serum of an individual inoculated against Rocky Mountain spotted fever might also agglutinate a variety of organisms including typhoid bacilli.

Oscar Bloch, Jr.: How much danger is there of contracting Rocky Mountain spotted fever from a contaminated instrument, needle or syringe? How long would it take?

F. W. Caudill: As I understand it, there is considerable danger of accidental infection occurring in laboratory workers, clinicians or other persons who work with infectious material from patients or animals.

The more direct transfer of infectious material, the greater the chance of infection taking place. In the transfer of infectious blood from a patient to a laboratory animal, the transfer is better when direct using whole or citrated blood.

The incubation period of the disease when the infection is so transferred should approximate that when infection takes place as a result of a tick bite, that is, 2 to 5 days.

In connection with the epidemiology of the disease, I would like to clarify a point in connection with how it was introduced into Kentucky. It has been repeatedly said that the cattle which were brought into Kentucky for pasturage, in 1934 from the drouth-stricken west introduced the disease. The evidence does not bear this impression out. The first cases of Rocky Mountain spotted fever recognized in Kentucky were one in each of May, June and July, 1934. According to a state representative of the U. S. Department of Agriculture, who supervised the relocation of the cattle in Kentucky in 1934, the first shipment of these animals to arrive in this state did not arrive until August 12, 1934. This was well after the onset of either of the 3 originally recognized cases. Furthermore, these cattle were shipped thru stockyards at Evansville, Cincinnati and Louisville and farmed out in northeastern, southeastern and western Kentucky with a few in central Kentucky. However, none in the vicinities where the first cases were recognized.

M. J. Henry: Is the bite of the male as deadly as that of the female tick?

F. W. Caudill: The bite of either the male or female may be infectious. Infection may be transferred from male to female tick through sexual intercourse and, therefore, might be considered a venereal disease in ticks.

W. C. Gettelfinger: How long does the ordinary case last?

F. W. Caudill: The duration of the average case is from 2 to 3 weeks, the temperature gradually returning to normal by lysis.

W. C. Gettlefinger: What is the best way to differentiate typhus and Rocky Mountain spotted fever?

F. W. Caudill: The best differentiation between the two diseases is clinical. Typhus is milder; occurs in the fall and winter instead of the spring and summer months; the rash appears around the eighth day of illness instead of the third or fourth day; the rash first appears on the trunk and thighs, rarely involving the face, instead of around the ankles and wrists as in Rocky Mountain spotted fever. In addition to these clinically differential points there is a laboratory test which is helpful. A rabbit is inoculated with blood from a patient sick with the disease after which, if its blood serum agglutinate both proteus OX 19 and OX 2, the disease is Rocky Mountain spotted fever, whereas if it agglutinates only OX 19 it is most likely typhus.

Harry M. Weeter: That the rickettsia would gradually spread eastward from the Rocky Mountain district was predicted long ago. Between 1918 and 1922 the late Dr. E. O. Jordan, who had done considerable public health work, made a statement before the first case in Kentucky was reported, that there wasn't anything from the sanitary standpoint to prevent Rocky Mountain spotted fever from travelling eastward and we should see the time when the eastern and central states would have this disease.

Rickettsia are named for Dr. Howard Taylor Ricketts. In case you have forgotten medical history, he died in Mexico City while studying typhus fever, from the bite of one of his experimental ticks. Previous to that time, in studying blastomycosis, he wanted to know what would happen if the organisms were injected into a human being. He injected some into himself, an act which gave him a pretty good scare. That is the type of man he was.

In a survey I made of 1000 sera from nonclinical cases submitted for routine serology, about one half of one percent gave a positive reaction with Proteus X-19 in a dilution of 1-100, usually designated as indicative of rickettsial infection. The cause of these reactions was not determined.

L. H. South: The laboratory test for Rocky Mountain spotted fever, and typhus fever is known as Weil-Felix test and these workers isolated proteus organisms from the urine of patients, which was apparently nonpathogenic, but proteus "X-19" used as an antigen was agglutinated by high dilutions of serums of cases of typhus fever and Rocky Mountain spotted fever. Later the strain OX 2 was used and seemed to be more specific for Rocky Mountain spotted fever than X 19, and these two antigens are used in all cases suspected of these diseases. If the higher dilution of the serum occur in OX 2 is it considered more of a specific for Rocky Mountain spotted fever than it is for typhus fever. Of course this organism is not a true antigen and the history of the case must be taken into consideration in making a diagnosis.

The first case of Rocky Mountain spotted fever that the laboratory of the State Department of Health was called upon for a test was in St. Matthews, in 1931 and Dr. Jensen, our Epidemiologist at that time, obtained a history of the family receiving a dog from Montana and the ticks recovered from this case were Dermacentor variabilis. Several years later four cases in Franklin County occurred and I have the picture of the case and also the tick that the mother recovered from the child. Some

of these ticks were sent to the United States Public Health Service laboratory and while that laboratory did not find virus, they assured me this special form of ticks could be a vector.

Rocky Mountain spotted fever attacks about 1,000 people a year and in certain sections is very virulent. Despite its name, the disease is found all over the United States. In the West, it is carried by the wood tick (Dermacentor andersoni) and in the East by the dog tick (Dermacentor variabilis) but only one in 500 ticks is infected. The virus is passed through a bite and may penetrate the skin if a tick is crushed between the fingers. It has always been my theory you can find whatever you look for if you look long enough. In 1930 I decided to look for leprosy in Kentucky, and I found three cases among native Kentuckians.

I want to compliment the essayist on this splendid paper.

Frank Stites: There is one point with which I want to take issue with Dr. Caudill. I have always been fond of hunting. Every year, I have been able to remove ticks from my dog as late as November. In mild seasons, they do hold over that long.

Another thing about which I have been rather inquisitive, about the time I saw this patient at St. Jospeh's, the next door neighbor had a wire-haired terrior. I asked what was the matter with Riley—he was loaded with ticks, they had picked off a dozen that afternoon. I have since seen three people who said their dogs were loaded this summer.

Another thing, some of this disease occuring in eastern states does occur in cattle, deer, etc. In certain cases among children, it is acquired on scouting expeditions, visits to parks, etc. The incidence among children in eastern states is due to that, and not definitely, as that case I had, to being situated among cattle.

Scarlet Fever—Sulfadiazine in preventive doses of one gram daily effectively controlled an epidemic of scarlet fever at a United States naval station and caused a pronounced reduction in respiratory complaints, according to a report by Lieut. Robert F. Watson (MC) U. S. N. R.; Lieut. Commdr. Francis F. Schwentker (MC), U. S. N. R.; Commdr. J. E. Fetherston (MC) U. S. N. (Retired), and Sidney Rothbard, M. D., in the Journal of the American Medical Association. The conditions prevailing at the station were such that the entire personnel could be divided into two groups, one of which served as a control for the other during the period of prophylaxis.

A FEW OBSERVATIONS IN GALL BLADDER SURGERY

E. W. Northcutt, M. D., F.A.C.S.
Newport

In the past treatment of gall bladder disease was chiefly medical. This consisted of diet regulation, rest and various medicines intended to induce the secretion or flow of bile. Biliary drainage by means of the duodenal (Levine) tube was also used for a time and is still used to some extent. For the acute attacks, "Gall stone colic" resort was had to morphine by hypodermic injection or oral administration; when the pain was controlled to a varying degree, or the attack had subsided, the patient again would be placed on his regime. As the field of surgery developed the cases that came to operation were:

(1) Those not improved by diet and medicine.

(2) Those in which the patient was unwilling to carry out the medical treatment.

(3) Those in which the acute attacks were so severe or frequent that surgical intervention became imperative.

Diagnosis at first was made entirely on clinical symptoms. Various laboratory procedures and the use of X-ray in diagnosis of gall bladder disease have been of great value and are well known. X-ray may show positive evidence of a pathological condition in the gall bladder, or may reveal outside the biliary tract that which is responsible for the symptoms, such as gastro intestinal or pancreatic lesions. X-ray findings have been reported correct in over ninety percent of cases. It is a small percentage of cases in which the X-ray will reveal no pathological lesion and one must rely entirely on clinical symptoms. Here judgment and care must be used in deciding which is surgical for it is often in these cases that poor results are obtained.

It is probably true that the X-ray and laboratory procedures are not used as often as they should be. It is also likely that the lack of definite diagnosis is sometimes responsible for the continuation of medical treatment. The treatment of gall bladder disease is surgical. The time element in the institution of surgery is important. This does not refer to the early or late operation in acute attacks, but to the period of time over which a history of gall bladder disease is given, whether six months, a year, five, ten or twenty years. We hear much about early and late operations in acute cholecystitis; many articles have

Read before the Campbell-Kenton Medical Society.

been written and great controversy is raised over whether to operate during the first twelve hours, forty-eight hours, week, two weeks, etc. The history in these cases will often reveal that this attack is just one of many that the patient has had. If these patients were given proper surgical treatment early in the history of their disease there probably would be little occasion for such controversy. The average duration of symptoms in cases of gall bladder disease coming to operation seems to be about fifteen years. Repeated attacks of gall bladder colic may result in liver damage, perforation of the gall bladder with peritonitis or abscess formation. In my experience it has been the exception to find common duct stone without a history of distention, right upper abdominal quadrant discomfort or acute attacks of pain.

Another possibility that must be considered when stones are contained in the gall bladder is carcinoma. Statistics are that from two to six percent of gall bladders containing stones show carcinoma and about ninety percent of gall bladders with carcinoma contain stones. The symptoms of carcinoma in the gall bladder are indefinite and are not distinguishable from other lesions affecting this organ. When the diagnosis can be made it is too late to do the patient any good. A hard, painless tumor in the region of the gall bladder with loss of weight and cachexia usually means but one thing, an early demise. Very few cases of carcinoma of the gall bladder that are diagnosed before operation can be cured. Operation in the early history of gall bladder disease should obviate this to a large degree. Again, in long standing cases of cholecystitis, repeated acute attacks accompanied by pain, nausea and vomiting with chills and fever, we usually find adhesions about the liver, gall bladder, duodenum and sometimes even the colon. This always adds to the difficulty of operative procedure and sometimes makes a complete operation impossible. Intestinal obstruction from stones may also develop where a large stone perforates from the gall bladder into the intestine. It is in the complicated cases that stones may be overlooked and left behind. They may either be already in the common duct or find their way there later and be followed by the bad results of such complications. Also, we must realize that the patient with gall bladder disease is growing older with each attack and that, eventually years alone become a problem in his case.

SUMMARY

(1) The medical treatment of gall bladder disease is something that has come down to us from times before surgery was known. It should be reserved for those cases in which surgery cannot be carried out. It is not a treatment of choice.

(2) The proper treatment of gall bladder disease is surgery.

(3) With all modern methods at our disposal today, correct diagnosis in gall bladder disease is possible in over ninety percent of cases.

(4) Surgery should be carried out early in the history of the disease before the complications here enumerated develop. The patient should not be subjected to the risk of serious complications of delay.

THE PATHOLOGY OF CELLS

JULIUS E. PINGUELY, M. D.
Melbourne

This paper does not discuss what the body requires at maturity in regards to its nutrition, but how cells respond to deficiency of any of the basic elements, as all cells of the universe fundamentally are composed of the same basic elements, Oxygen, Carbon, Hydrogen, Calcium, Phosphorous, Potassium, Sulphur, Sodium, Chlorine, Magnesium with minute traces of Iron, Iodine, Fluorine, Silicon. If there is a deficiency of one of the basic elements the metalic constituents of food do not retain their solvency. In the last year laboratory scientists have discovered unsolved metal in the blood streams of victims that have died from cancer. Any deviation is manifest by serious pathological conditions, as man and all living things are composed from the same basic elements. Food must be supplied with the material of which the cell is composed. Cells are not passive but aggressive. They do not receive food but forcefully take it. The mother, as well as seed and grain planted in the soil, has no more jurisdiction for its maturity than the hen that laid the egg, they demonstrate the vitalism and life of a fertilized ovum, as in extra uterine pregnancy. The tube holding the ovum breaks away and falls into the abdominal cavity, the ovum casting out tentacula attaches itself to the peritoneum. Having undergone further development, it rapidly invades adjoining structures, the omentum, intestines, etc. and forces them to nourish it. In time the electric energy stored in the ovum becomes exhausted, the mother's body then supplies the necessary energy. Between five and six months the convolutions develop sufficiently with the force from the pulsation of the heart to produce the necessary electric energy

for its future development and birth advancement toward the creation of a new individuality. The mother must still supply the basic elements. The complex elements of food are necessary to nourish the complex elements of the body, but in the construction of a new organism, cells require the basic elements for cell creation. Cells rarely produce a perfect specimen. Several men have a heart constructed on the right side, babies are born with arms or limbs not completed. The mother's blood was deficient in calcium. The admiration of the Redwoods of California should be bestowed on the cells of its bark as they are its creator, as the trunk and limbs are dead cells. The fundamental theology that cells are creators of all living things simplifies our knowledge of pathological and morbid anatomy. Biological cells have great mutability. Cells that are supplied with nutrition will throw out tenacles and assume the obligation of feeding others, as cells are the architect, builders, constructionist from the design of the species from which it came. Cells have intelligence, can judge distance and direction and if from any cause they are gradually being deprived of nutrition will make the greatest effort to obtain it. As cells have no locomotive activity, their only source is by reproduction towards their objective. Does a cell search for nutrition or does it revert to its primitive beginning of construction to build a new organism that is capable to furnish its necessary nutrition? Cells suddenly deprived of nutrition make no effort by growth to obtain it and die. Cells bathed in blood, as the cells of the arterial system, also make no effort by growth. Surrounded by blood the stimulus for nutrition is appeased and the dead cells fill the artery resulting in thrombosis, embolism of the coronary artery and arterio sclerosis. If the blood or nutrition did not retard cell growth, the many heart conditions would be of short duration. Every cell has its own capilliary. Cells receive no nutrition from the blood they transport. It is not the nutrition (the basic elements must be accurate) the mother consumes that determines the size of its offspring, but the electrical energy at the time of conception. Electricity is the stimulus that increases the vitality of cells to create stronger and larger objects. During the Pilocene and the Jurassic period of intense heat and electricity from the sun Dinosaur and other monsters of great size and strength were developed. Their primitive skulls showed great mental deficiency. Their circulation was maintained by great ganglion of their heart, they were cold blooded. The realization of any organism that is conscious of its existence, is the primitive beginning of life. Endowed from a living ovum when fertilization occurs, it is a self-conscious aggressor and depends entirely on its vitalism to be delivered. The cell is the guardian of its organism, always ready to repair cuts, wounds, lost tissue and fractures. A cut without tension to impede circulation to the cells throws out tentacula and healing is rapid. Surgeons mention it as healing by first intention. Where there is great loss of tissue, cells again assume their pathological construction of growth and new cells will replenish the lost area. If the pathological creation of all living things and its preservation of its organism did not exist, the earth would be void of all life. In the interval of extensive wounds the area is congested with blood which will retard cells not involved in the process of repair. As the circulation becomes deficient all the cells become hungry, the collateral artery remains quiet until the circulation is again established, then they will again assume their natural pathological existence. Malnutrition is the pathological cause of cancer, Hodgkin disease, all growth, tumors, internal and external. The skin covering the bone structure is most unfavorable for cell growth, and pressure rapidly obliterates all blood in its area, the cells die quickly and slough. The general emaciation confirms that it is not a local phenomena, but every cell in the entire body is affected where its circulation is retarded as in the breast and uterus, when cancer develops. A woman operated on first for cancer of the nose, twice for cancer of the face, the fourth time cancer of the neck, the fifth cancer of the neck was fatal. This case was most unsatisfactory. As she was born with very small external caratoid arteries and nothing could be done to increase a normal circulation to her face and neck, it was an epithelial carcinomata. Her poor circulation was most favorable for metastatic deposits. Cancer had been produced artificially by surgeons after removal of a breast because too much tissue to cover the wound was removed, too great a tension was placed on wound so that the blood supply to the area was not sufficient, consequently, you have what the surgeons call a recurrent cancer, a demonstration of malnutrition.

Tuberculosis remains the most deadly saboteur in our midst. Sixty thousand Americans will perish by the disease this year. C. M. Wylie, Mich. Tuber. Assn.

STUDYING THE PATIENT AS A WHOLE

A. F. Cornelius, M. D.
Berea

In this machine age we often hear a mechanical device, refrigerator, radio, etc., spoken of as a unit. A mechanical unit though composed of many members functions as one body, the whole of which is in some measure dependent on each part. The most complex machine is simplicity in itself compared to the human body. For the purpose of this discussion at least we will call man a unit, very complex in nature, whose being is the result of the environment and the matings of his progenitors reaching back into dim antiquity, and of his own environment since birth. Making up this environment which has produced man as he appears today, from the highest to lowest type, may be mentioned climate, food, sunlight, wars, racial mixtures, floods, migrations, slavery, infections, education or the lack of it and living conditions in general.

When a patient appears before a physician for an examination, the marks and results of the environment of his progenitors, at least since they began to walk on their hind legs, and since his or her own birth are there for observation, study and interpretation. This viewpoint does not place diagnosis on the same plane as phrenology or predicting the future by looking at the palm. Rightly interpreted physical characteristics are a great help in sizing up a patient for diagnosis, prognosis and treatment. Of course no one can fully interpret a man's characteristics in the light of causal environment, but if we do so in part it is of immense value in the practice of medicine and in all human relations for that matter.

As stated above, man for the purpose of this discussion, is a unit. Anything that affects the smallest part of this unit affects all. Take for instance an infected finger. Besides the local reaction to infection there is a constitutional reaction, characterized by blood changes, possible increase in temperature, mental effects, and effects on the glands of internal secretion which are very imperfectly understood. Again any one of the glands of internal secretion, if impaired, has an effect on the other parts of the body. The intelligent treatment of any condition, of whatever nature, should take into consideration the constitutional reaction and measures to affect that reaction favorably.

Read before the Madison County Medical Society.

It is not the purpose of this discussion, however, to prove that man is a unit, but that it is useful to study and understand as fully as possible, any given patient as a whole, at the same time not depreciating any special understanding of a limited field. I am persuaded that we all do this either consciously or subconsciously. However we can profit by classifying our knowledge along this line and simplify rather than confuse our thinking. For this purpose it seems well to classify people into three types, which, for want of better adjectives, we will call dynamic, balanced and fatigable. These adjectives do not attempt a full description of types, but rather the outstanding characteristics of each type. And of course, pure types seldom exist, but combinations. However, each person is more of one type than another.

The first type, Dynamic: We may say that this type man's ancestors developed in the temperate zone, say northern Europe. He is apt to be, though not necessarily, a blonde, rugged in constitution, courageous, energetic. His head and face which reflect his constitution and temperament are crowned with a heavy suit of hair which does not fall out with age, the hair line reaching well forward, making the forehead rather low. The eye is the most instructive feature, usually blue or grey, the lower lid fitting up well and strong to the eye, no sagging or undue exposure of the conjunctiva. The nose should have a high, strong bridge, lips thin, strong superior and inferior maxilla. The arms should be long and hands large and hard. This sketchy picture is of one whose ancestors have battled with elements and with one another. He is tempered steel from exposure to extremes of temperature, finding it necessary to hoard for winter and struggle to survive. So we find this man with surplus energy for the ordinary walks of life. He has a good set of glands of internal secretion, his nerves are steady and reliable. What does this have to do with making a diagnosis of a condition affecting one of such pattern? Well, in the first place you wouldn't suspect him of being a neurasthenic or a psychoneurotic. This rugged type may not experience any sickness after measles and chickenpox until later in life his surplus energy has worn out his heart muscles, causing a heart death. Witness the cause of death in our more aggressive citizens, doctors included. There is a weak spot in his makeup, however, which comes from excessive outlay of energy or exposure, robbing the powers of resistance to infection, making an opportunity for such

infections as pneumonia, rheumatism and tuberculosis. The dynamic type under ordinary conditions eats and sleeps well and is not troubled with constipation. If the subject is a female, in labor she has plenty of dynamite and it is a good time to go easy with pituitrin for instance. This type is ordinarily a good surgical risk and doesn't require a lot of opiates after an operation.

The Balanced Type: For this type I can do no better than give a few lines from Oliver Wendell Holmes' wonderful "One Hoss Shay."

"Now in building chaises I tell you what
There is always somewhere a weakest spot
And that's the reason beyond a doubt
That chaises break down but don't wear out"

Then near the end of the poem he says:

"There are traces of age in the one hoss shay
A general flavor of mild decay
But nothing local as one may say."

So with the balanced type, these subjects, not having any especially vulnerable part in their makeup, if they have with the Greeks the philosophy of moderation in all things live to a ripe old age and die of nothing local as one may say. This type of person is not so interesting to doctors who through many centuries have shown interest only in the presence of pathology. However, if positive eugenics ever come into practice this type might well become the ideal in a physical way.

The Fatigable Type: In this case means those characterized by instability, those who glorify their infirmities, which are often purely imaginary to begin with. They constitute that large and returning clientele who ride their doctors, plural you notice, like a jinx, looking for assurance, encouragement and sympathy. Such a patient, if they have money, seldom gets well, because the situation is a lasting source of mutual admiration between the doctor and his patient. If the patient is busted, however, the doctor tells the patient the truth as soon as he finds it out and all of the romance is taken out of the case. Laying aside all jokes, these patients have a physical background for their conditions, which consists primarily of an inherent weakness in their makeup, nervous or endocrine or both shall we say, which makes them unable to battle with the vicissitudes of life. They are assailed with doubts and fears, susceptible to suggestion, good and bad. Victims of a great variety of complaints ranging all the way from shell shock to slightly dizzy spells. They often have the triad of anorexia, insomnia and constipation. Though always complaining it is usually difficult to find any organic disease. Their low energy output is protective against organ damage and lowered resistance to infection. Allow me to say though that all of these patients should have a careful examination, because it gives the patient confidence and there may be pathology behind the neuroses. Most cases of low blood pressure are found in this type, of course. These same people often have their best health after forty or fifty, when a moderate rise in blood pressure occurs due probably to a stiffening of the blood vessel walls incident to age, thereby relieving mechanically the neuro-musculo-circulatory mechanism of maintaining vessel tone. It is conceivable that this change is of immense value to these patients.

The physical makeup of these people is characteristic also. Their progenitors presumably lived in a sunnier clime where life was easier. A typical face is oval with high rounding forehead, eyes full, mouth loose, hands soft and fingers tapering.

The subject of studying the patient as a whole is too large to carry into detail. This brief and incomplete outline is more to suggest the viewpoint of sizing up a patient in the light of what heredity and environment has given a man as revealed through his or her physical characteristics.

As mentioned above these suggested types are seldom seen as pure types, but all kinds of modifications and combinations. However, if a physician learns to evaluate physical characteristics in the light of causal environment he has an approach to the understanding of his patient that can be had in no other way.

I have attempted to give you in the dynamic and fatigable types, pictures of two people, the dynamic standing at one end of a long line of people, the fatigable at the other end, between which are people of varied appearance and makeup, bearing the marks of both strength and weakness. I leave it to you to classify them in the light of the extremes at the ends of the line.

Mention was made above to the effect of a local infection on the body as a whole and the desirability of taking into consideration the constitutional reaction as well as the local reaction. That is an instance of a condition beginning locally, and ordinarily accidentally and affecting the rest of the body. A more important class of infirmities are those which are not accidental, and even if localized can be laid pri-

marily to the patient's failure to adapt himself to living conditions which offer the greatest measure of health. For instance, suppose a man who through greed, necessity, or what not, is denied enough rest, proper food, and other suitable living conditions and thereby becomes a victim of tuberculosis. The poor adjustment, which, of course, in many instances, is beyond one's control should rank as the principal and primary cause of disease and the infection secondary. So in other diseases of whatever nature such as stomach ulcer, hypertension, myocarditis, toxemias, neuroses, various phases of focal infection, asthma, headaches, diabetes, obesity, malnutrition, constipation, dyspepsia, postural defects, thyroid disease, functional derangements and metabolic disease. In these diseases and others the realm of the personality should be explored for an underlying cause and aggravating stimuli. Some of these factors of a personal nature which may be conducive to disease are ignorance, fears, persistent worries, greed, excesses, improper sense of values, vanity, introspection, overactive imagination, frustration, vocational misfit, bad personal hygiene, bad habits, and fatigue, all of which causes are intangible, causes not in themselves demonstrable by microscope, test tube, or x-ray, but often producing results which are working detriment and sometimes havoc to the body.

Studying the patient as a whole is not suggested as a method to supplant or substitute for any other method of diagnosis, but as another aid in diagnosis by which we become, first philosophizing diagnosticians and second, microbe hunters.

"Clubbed Fingers" and Ulcerative Colitis.—Schlicke and Bargen point out that clubbing of the fingers is seldom a primary condition. Bronchiectasis, pulmonary tuberculosis, empyema and mediastinal or pulmonary tumor are commonly present. Isolated cases have been reported to follow various disorders of the kidneys and liver, amyloid disease and cachexia strumipriva. There has been little mention of clubbed fingers as a sequela of chronic ulcerative colitis. The authors review seven instances of clubbed fingers in patients under treatment for chronic ulcerative colitis seen within the last two years at the Mayo Clinic. In none of these cases was there evidence of any other primary disease. To explain clubbed fingers as a sequela of ulcerative colitis is as unsatisfactory as attempting to explain its more frequently associated occurrence with other conditions.

TRANSURETHRAL PROSTATIC SURGERY

W. R. MINER, M. D.
Covington

Transurethral prostatic surgery has gained a predominant place in urology especially during the past decade and no doubt will attain a still higher place as instruments and machines are perfected and urologists become more proficient in their use.

To be able to operate upon or to remove a part or all of the prostate gland without cutting through normal tissue suprapubically or perineally is certainly an advantage not to be underestimated. Furthermore, to be able to stop the operative procedure at any time, if the condition of the patient warrants it, and to resume the operation at a later date when the patient's condition has improved is a further advantage.

No doubt the general surgeon would shout his success from the housetops if he could remove a diseased gall bladder or an acutely inflamed appendix without first cutting through the abdominal wall. In addition to that if he could stop an operative procedure at will and resume it at a later date without injury to the patient he would be very much elated.

Transurethral prostatic surgery is certainly more tedious and probably more difficult than open operations upon the prostate. But the advantage to the patient far out-weighs any additional trouble that the operator is put to. The patient can be ambulatory practically all the time he is in the hospital and usually does not miss more than one or two meals on account of the operation. The fact that he is more comfortable, can walk about the hospital and for the most part wait upon himself is surely worth all the trouble and effort transurethral prostatic surgery may entail. It is rather widely conceded that the poorer the general condition of the prostatic patient the more transurethral prostatic surgery is indicated.

I wish to report briefly upon one hundred prostatic patients who came to us for treatment during the past two years with symptoms referable to vesical neck pathology.

In the group were sixty-nine patients with prostatic hypertrophy, eight with fibrous median bars, twenty with carcinomas of the prostate and three with prostatic abscesses.

Read before the Harrison County Medical Society.

Eighty-one of the patients were operated upon transurethally. Thirteen patients with prostatic hypertrophy were operated upon suprapubically. Three patients with prostatic abscesses were treated with incision and drainage transurethrally. The remaining three patients were treated by orchidectomy alone.

The three patients who had prostatic abscesses were in severe pain when first seen. One patient was in so much pain that he was unable to sit down, and continued to walk about the treatment room begging that something be done for his pain. These patients were sent to the hospital, given spinal anesthesia and the abscessed lobes incised with the Nesbit modified McCarthy resectoscope. In each patient only one lateral lobe of the prostrate was abscessed. Small amounts of pus escaped from the prostatic ducts in the floor of the urethra when the abscess was pressed upon per rectum. It may have been possible to empty the abscesses without incision if excessive pressure had been exerted upon the abscesses, however, it was felt that such a procedure was fraught with the danger of producing metastic infection. In each case twenty to thirty cc. of pus escaped under pressure when the incision was made into the abscess. The patients obtained immediate relief but were kept in the hospital for one week for observation. Each made an uneventful recovery with no recurrence of the abscess, and no doubt could have been dismissed two or three days following operation. Two of the patients, aged twenty-three and twenty-four, gave a history of having had gonorrhea recently. The third patient, aged forty-eight, denied ever having had gonorrhea.

The majority of prostatic abscesses drain spontaneously but occasionally, as in these three cases, need surgical intervention.

Of the twenty-one patients who had prostatic carcinomas fifteen had bilateral orchidectomies, the majority of whom obtained relief from pain in two or three days and general improvement within a week or two. One patient with extensive metastic lesions who had been bedfast for several months and who cried with pain whenever moved, was free from pain and able to walk about the ward within a week after orchidectomy. Another patient who was in a serious condition had a supraclavicular metastic nodule about 3x3 cm. in diameter and metases elsewhere in his body. Within two or three months following orchidectomy the supraclavicular metastatic nodule had disappeared and the patient had gained fifteen to twenty pounds in weight. He was also able to take long walks without tiring.

To Charles Huggins of Chicago, belongs much of the credit for giving to the medical profession a means for relieving those unfortunate patients who have prostatic carcinomas.

The eight patients with fibrous median bars showed more marked bladder changes than those with simple hypertrophy or with carcinomas. Three of the patients with fibrous median bars had rather large diverticula.

Three patients with prostatic hypertrophy had many vesical calculi. Many of the patients had a few small stones or sand in their bladders. The calculi were removed by litholapaxy at the time of operation upon the prostate, except in one patient where the stones were too large for the lithotrite to grasp.

The ages of the patients with prostatism varied from thirty nine to ninety. The youngest patient with a carcinomatous prostrate was fifty-seven.

Many of the patients who had transurethral surgery performed had to be operated upon more than once in order to obtain good functional results. One patient who was a diabetic and in a very serious condition was operated upon four times.

There was no immediate postoperative deaths in the group upon whom transurethral prostatic surgery was performed. However, one patient died of coronary occlusion one week after returning home and another developed hemaplegia one week following operation and died about two months later. Two other patients died cardiac deaths a few months after leaving the hospital. Still another patient died of carcinomatosis and hemorrhage seven months after transurethral surgery, however, this patient refused to submit to orchidectomy.

One patient died about ten days following cystotomy either from coronary occlusion or pulmonary embolism. Autopsy was refused by the family.

In a previous study of one hundred consecutive cases which we reviewed two years ago and which did not include any of the patients in the present group, the following figures were found: Sixty-nine patients had two stage suprapubic prostatectomies, and thirty-one patients had thirty-eight transurethral prostatic resections performed. Of the seventy-one suprapubic prostatectomies there were five deaths giving a mortality rate of seven percent. Of the thirty-one cases who had

one or more prostatic resections done there were no immediate operative deaths, however, at the time the study was made two years ago three of the group had subsequently died from carcinomatosis. The operative mortality for the entire group was five percent. Not included in this group were five patients who died following cystotomy which brought the operative mortality rate on the patients operated upon suprapubically to approximately ten percent.

A comparison of the figures in the two series of one hundred cases each shows that the percentage of transurethral prostatic resections done by us has been increased from thirty-one percent in the first series to eighty-two percent in the second series, with a lowering of the immediate operative mortality from seven percent to one or two percent.

LINSEED OIL

Chas. Waugh Reynolds, M. D.
Covington

For four years I have been using Linseed Oil for certain conditions. The results thus far have been so satisfactory that I would like to get the reactions of others as to what results they may obtain with the same in their practice.

How and why it acts thusly, that is what I desire to know.

Potter in his Materia Medica mentions that Linseed Oil is an excellent demulcent in coughs of various kinds.

Over four years ago I had personally an aggravated case of sinus condition that while it was helped by the usual sprays, etc., still it refused to clear up. I then recalled reading of the facts noticed in one of the Chicago Laboratories, where they found that in one of the departments where they kept animals for experimental purposes, these animals all seemed to be troubled with a prevalent "cold." In another department the animals were found to be free of this "cold." Investigation showed that in the "cold free" department the atmosphere was more or less charged with oily vapors. Removal of the animals with "colds" to the other department soon cleared up these "colds."

I then thought that I would experiment, and deemed that the best one upon whom to experiment was myself, as I will never let the imagination run away with myself. I will not self hypnotize myself. The goods must appear in fact, not fancy.

Never having used Linseed Oil previously, I determined to start with tea-spoonful doses three times a day. The first day's dosage not hurting me in any way, the next day I took a double dosage. No unfavorable symptoms appearing, I doubled the dose the next day and my "cold" was gone. I kept up the dosage for several days and then awaited a "return engagement" which came in about two months. Table-spoonful doses for a day and the sinus trouble was very much better and gone by the next day.

Being satisfied with the favorable results in my own case, I determined to branch out. Some weeks after a patient arrived, who stated that his nose was "running like a sugar maple." I prescribed the oil—having found no sign of polypi or other exciting cause and told him to get the prescription filled at least once and not to stop a single dose, no matter how unpleasant the taste might be. Some weeks afterward he came in and stated that that medicine had cured him, although he stated that he had never taken such a vile dose.

When I first began to prescribe the oil the druggists would call me up and ask what it was that I had prescribed, telling me that they had never had any prescriptions for the oil before. I told them to fill the prescription as ordered for there would be more to follow.

The results for sinus conditions have been uniformly satisfactory.

At the time I had a cataract case that before operating, I would do some experimenting. Linseed Oil was tried. That man has not been operated on for cataract. The sight has continued to improve, so that a bare cloudiness of the lens now is to be seen on illumination and this cloudiness continues to clear up. I have tried it out on other incipient cataracts with like pleasing results. Others might not be so fortunate, yet I am of the opinion, that the oil is worthy of a trial. The change is slow, but so far it seems to be sure of improvement.

With this presentation of my results thus far, the question will naturally arise, "How and why are the results?"

We know that Linseed Oil has linoleic and linolenic acids, besides the glycerides of oleic, stearic, palmitic and myristic acids other than the glyceride of lincleic acid. Some authors look upon linoleic acid as representing the vitamin F. Others discard the vitamin F.

One of my correspondents states, "There are no data regarding the human requirement of vitamin F and also there is little in the literature in support of its usefulness in man."

But if results are apparently obtained, how explain these results?

We know our food as we receive it for consumption is notoriously deficient in the vitamins. We have refined our diets to such an extent that while the body is often overloaded with starches, the ductless glands are starved by the vitamin deficiency. I believe these vitamins constitute the main food for the ductless glands.

Has the oil such a marked effect upon the intestinal tract as to prevent the absorption of harmful toxins that being absorbed are excreted in the nasal passages? Or is the oil efficient by reason of the vitamins that it contains, which perhaps feed the possible ductless gland that has a governing effect upon our mucous membranes?

Does the result in the sinuses depend upon the demulcent effect of the oil upon the mucous membranes? If so, how does the oil have a demulcent effect? Is it the linoleic acid that does the trick, perhaps modifying the reaction of the mucous or muco-purulent discharges?

We know that the ductless glands are the governors of the body. Keep them in balance and we can throw off the approach of disease. But to be kept in the proper balance, they must not at any time be starved.

We know that the human being is subject to certain conditions that are thrown off before we reach that age, when they most frequently occur. Cancer comes at certain times in life. Have we starved the possible ductless gland that has been a protector, until starved, it ceases to function as it should? I believe that herein lies the secret to the causative force that meeting with no normal resistance, proceeds to conquer the body.

But how explain the apparent effects in the cataract cases that have fallen to my lot?

What is the underlying cause that results in cataract—a characteristic that seems to be often hereditary? The child will inherit the troubles of the parent that it resembles. Like begets like, as I had in an article published in the Journal about six years ago.

Family life often creates a certain type of family feeding, certain likes and dislikes for food. Why not then a form of food that is not properly balanced?

It has been stated that the body properly fed should out live the old ages that we see now a day. Feed the body what it needs to replace what is worn out and discarded. But do we with the refined diets that we boast of, but should be discarded as not being worthy of a boast?

We feed the cow the bran and eat what is only starchy in material. So it is when we stew vegetables. We throw away the fluids, that are rich in the vitamins and eat the rest. We stuff to fatness and yet our ductless glands, our best friends, well, they are the neglected child, that would most help us.

In the case of the cataracts that I had, and which have been clearing up so satisfactorily, what is it in the Linseed Oil that is turning the trick? Is it the linoleic acid, that perhaps has some effect upon the clouding factor in the cataract? Or does the oil act upon some other structure of the body that is the dominating influence? Surely an answer can be arrived at that will be satisfactory. It may be that with the proper diet we may be saved the terrors of cancer as well as the discomforts of cataract. Laboratory work along these lines should produce worthwhile results.

BOOK REVIEW

THE PHARMACOLOGY OF THE OPIUM ALKALOIDS: Part 1 and Part 2, Supplement No. 165, Public Health Reports of the United States Public Health Service by Hugo Krueger, Assistant Professor of Pharmacology, St. Louis University School of Medicine, Formerly Research Assistant Professor of Pharmacology, University of Michigan, Nathan B. Eddy, Principal Pharmacologist, U. S. Public Health Service, Formerly Research Professor of Pharmacology, University of Michigan, Margaret Sumwalt, Associate Physiologist, U. S. Public Health Service, Formerly Research Instructor of Pharmacology, University of Michigan. U. S. Government Printing Office, Superintendent of Documents, Washington, D. C., Publishers. Price per volume $1.50.

Part 1 covers a complete study on morphine, its actions on the nervous system, respiration, metabolism, circulation, blood and digestion, its emetic effect, toxicity, tolerance and addiction, absorption and fats. It also includes a very complete subject index with reference numbers for quick reference to the very complete bibliography in Part 2 .

The bibliography in Part 2 covers publication from 1800 through 1942. Part 2 covers the other alkaloids, codeine, ethylmorphine, dihydromorphinone, diacetylmorphine, thebaine, apomorphine, other derivatives of morphine, sinomenine, papaverine, narcotine, narceine, and cryptopine. In addition, Part 2 has a very full subject index and contains the author index for both volumes.

A copy of this publication may be consulted at the library of the State Department of Health, 620 South Third Street, Louisville.

BURNS, SHOCK, WOUND HEALING AND VASCULAR INJURIES, Military Surgical Manuals Volume V: Prepared under the auspices of the Committee on Surgery of the Division of Medical Sciences of the National Research Council. 272 pages with 82 illustrations. Philadelphia and London. W. B. Saunders Co., 1943. Price $2.50.

This volume is one of a series developed under the auspices of the Division of Medical Sciences of the National Research Council to furnish the medical departments of the U. S. Army and Navy with compact presentations of necessary information in the field of military surgery. This volume deals with burns, shock, wound healing and vascular injuries. The illustrations are splendid and instructive and a valuable guide for civil life as well as military fields.

The section on Burns covers early treatment with sulfonamide compounds, treatment of infection, early plastic treatment and skin grafting, treatment of burns received in chemical warfare, etc. Shock is discussed in relation to its mechanism, prevention and treatment and fluid replacement therapy. Under Wound Healing are taken up local factors, systemic conditions, sequence of simple healing, ameboid movement and proliferation of connective-tissue cells, how surgical methods aid or hinder healing, types of traumatic wounds and of missiles, infection, etc. The consideration of Vascular Injuries includes treatment of hemorrhage, injuries of arteries and diseases of arteries and veins.

ESSENTIALS OF SYPHILOLOGY by Rudolph H. Kampmeier, M. D., Associate Professor of Medicine, Vanderbilt University School of Medicine, in charge of the Syphilis Clinic and Visiting Physician to Vanderbilt University Hospital with chapters by Alvin E. Keller, M. D., J. Cyril Peterson, M. D. 516 pages, 87 illustrations. Price $5.00. J. E. Lippincott Company, Publishers, Philadelphia.

This book was prepared to provide a brief text on syphilis for the practitioner of medicine. Its objectives may be summarized as follows:

1. To present the concept of syphilis as a systemic disease whose manifestations may be manifold, at times presenting problems for every type of specialist and therefore of interest to the general practitioner.

[illegible] and [illegible]

3. To emphasize that without [illegible] acute syphilis, a clinical diagnosis alone is not justifiable.

4. To develop a critical evaluation of serodiagnosis.

5. To raise the index of suspicion as to the role syphilis may play in chronic disease years after the infection was acquired.

6. To stimulate better antisyphilic treatment.

7. To show that the physician's responsibility in syphilis control does not cease when a patient is placed under treatment.

8. Lastly, to demonstrate that the education of the patient relative to the disease is an important factor in the control program.

INDIGESTION, ITS DIAGNOSIS AND MANAGEMENT. With special reference to diet, by Martin E. Rehfuss, M. D., Professor of Clinical Medicine and Sutherland M. Prevost, Lecturer in Therapeutics, Jefferson Medical College, Philadelphia. Illustrated 556 pages. Publishers, W. B. Saunders Company, Philadelphia. Price $7.00.

This volume is written by one of America's foremost gastro-enterologists and one of its best features is the extensive coverage given to diet and the modern biologic viewpoint which the author brings to the subject. The section on diet describes how various foods react, when certain foods should be eliminated and how to institute a protective diet. Vitamin contents of various foods are given. Of real importance are chapters on Indigestion in War time and Indigestion of old Age.

REHABILITATION OF THE WAR INJURED: A Symposium Edited by William Brown Doherty, [illegible] Edward D. Rhodes, Ph.D., Published by the Philosophical Library, Inc., 15 East 40th Street, New York City, N. Y. Price $10.00.

This symposium by many of the American and British most distinguished surgeons and in[illegible]s in a comprehensive manner [illegible] problems in dealing with rehabilitation of the wounded. Neurology and Psychology, Reconstruction and Plastic Surgery, Orthopedics, Physiotherapy, Occupational Therapy and Vocational Guidance, Legal Aspects of Rehabilitation and many miscellaneous subjects are discussed from the personal viewpoint and experience of the authors.

It is a splendid contribution to surgical and medical literature and should be in every doctor's library who will come in contact with wounded soldiers.

THE MIND OF THE INJURED MAN: by Joseph L. Fetterman, M. A., M. D., Assistant Clini[illegible] Professor of Nervous Diseases, Western Reserve University School of Medicine, Cleveland. [illegible]s. Industrial Medicine Book Com[illegible] Publishers. Price $4.00.

[illegible] this volume will give the medical [illegible] and physician a better understanding of the problems involving trauma and the nervous system as well as some of the physical, emotional, social and economic suffering to which these problems give rise. Many neuroses, [illegible] and physical injuries [illegible] the nervous system can be alleviated if proper knowledge, thought and study are given in solving each individual problem.

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NEXT ANNUAL MEETING LOUISVILLE 1944

COUNTY SOCIETY REPORTS

Campbell-Kenton: The regular monthly meeting of the Campbell-Kenton County Medical Society was held at Spears Hospital on Thursday, September 9, 1943 with seven members present. The meeting was called to order at 9:00 P. M. by the president, N. A. Jett. The minutes of the previous meeting were read and approved.

The following communications were read:

A letter from R. E. Teague thanking the society for meeting with P. S. Pelouze.

A letter from the Jefferson County Medical Society relative to suspending dues for men in the armed services.

A card of thanks from Dr. Britenburg and son Robert.

Letters from the National Physicians' committee for the Extension of Medical Service pertaining to Senate Bill S1161.

An application for membership was received from T. B. Thompson of Ft. Thomas. It was referred to the Board of Censors.

E. DeVillez was elected as delegate to the state meeting. Alternates elected were: Drs. Shaw, L. C. Hafer, Joe Northcutt and W. R. Miner.

Bill for flowers $5.00 was ordered paid on motion by H. Caldwell.

There being no further business the meeting was adjourned.

Robert L. Biltz, Secretary.

Campbell-Kenton: The regular monthly meeting of the Campbell-Kenton County Medical Society was held at St. Elizabeth Hospital on October 7, 1943 with eight members present. In the absence of the president the meeting was called to order by the vice president, Dr. Oscar Frickman at 9:15 P. M. The minutes of the previous meeting were read and approved.

The following communications were read: A card of thanks from Dr. and Mrs. John Herget, and a letter from the Northern Kentucky Druggists' Association, offering their cooperation with whatever stand the society takes regarding the Wagner-Murray Senate Bill No. 1161. The letter was discussed by Drs. Hadley Caldwell, Luther Bach, and Phil Dorger.

A motion was made by Dr. H. Caldwell to call a special open meeting at St. Elizabeth Hospital on Sunday, October 17, at 2:00 P. M. to discuss the bill. The motion carried. A committee was appointed consisting of Drs. J. H. Caldwell, Wm. O'Rourke and Oscar Frickman to stimulate interest in the meeting at St. Elizabeth, Booth and Speers Hospitals, respectively.

The following bills were ordered paid:

(1) To Kenneth Michaels—notification cards.
(2) To secretary for salary, stamps and cards, $84.65.

The application of Dr. Tom B. Thompson of

Ft. Thomas, for membership was unanimously approved.

Mr. Rudd reported that over fifty members had taken the society approved disability insurance plan which insured our participation in the Loyalty Insurance Group.

A motion was made by Dr. O'Rourke and seconded by Dr. Bach authorizing Mr. Rudd to send the following letters under the secretary's signature; a letter inviting Grant, Bracken, Pendleton and Boone County doctors to participate in the Loyalty Insurance plan as a subgroup; a letter to the twenty-three members not already personally contacted concerning the group plan; a letter to all members explaining that the Loyalty Insurance was approved by the society and not the Mutual Benefit of Omaha; a letter to all members in the armed services inviting them to join in the group plan, the insurance to become effective on their return to private practice.

There being no further business, the meeting was adjourned.

Robert L. Biltz, Secretary

Henry: The regular meeting of the Henry County Medical Society was held at the Castle Hotel, New Castle on Thursday, September 9, 1943 at 7:30 P. M. A. P. Dowden was the host, and a delicious dinner was served. Maurice Bell asked the blessing.

G. E. McMunn, President, presided, and while waiting for dinner to be served, suggested that the minutes of the last meeting be read, which was done, and approved as read.

Members present were as follows: O. P. Chapman, F. D. Hancock, R. J. Skidmore, Maurice Bell, A. P. Dowden, J. C. Hartman, A. G. Elliston, W. F. Carter, W. W. Leslie, Owen Carroll.

Guests present were as follows: H. H. Hagan, Louisville; Mrs. F. D. Hancock, Mrs. R. J. Skidmore, Mrs. Maurice Bell, Mrs. A. P. Dowden, Mrs. J. C. Hartman, Mrs. A. G. Elliston, Mrs. W. F. Carter, Mrs. Owen Carroll, Mrs. W. W. Leslie.

There followed a short business session at the conclusion of dinner, and a suitable date for the October meeting was discussed. It was decided that a temporary date should be set for October, and that at the October meeting a permanent date for subsequent meetings would be discussed and set. It was moved by O. P. Chapman, seconded by Maurice Bell, and unanimously passed that the October meeting would be held on the second Tuesday thereof.

The Secretary, Owen Carroll, called the Society's attention to the annual meeting of the Kentucky State Medical Association to be held in Louisville October 4, 5, and 6 of this year at the Brown Hotel, and that Maurice Bell is the delegate, and O. P. Chapman, alternate.

The President turned the meeting over to the host, A. P. Dowden, who introduced the guest speaker, H. H. Hagan of Louisville, who gave a very interesting and instructive paper on Surgery of the Biliary Tract, which was followed by routine discussion.

The Secretary announced that A. G. Elliston would be host for the October meeting, and there being no further business, the meeting adjourned at 9:15.

Owen Carroll, Secreatry

Henry: The regular meeting of the Henry County Medical Society was held on October 12, 1943 at the Castle Hotel, New Castle at 7:30 p. m. Dr. A. G. Elliston was host. Dr. Bell asked the blessing and a delicious dinner was served.

Members present were: G. E. McMunn, A. G. Elliston, O. P. Chapman, Maurice Bell, A. P. Dowden, J. C. Hartman, W. B. Oldham, W. F. Carter, R. J. Skidmore, Owen Carroll.

Guests present were: Dr. and Mrs. H. L. Townsend, Louisville, Mrs. A. G. Elliston, Mrs. G. E. McMunn, Mrs. Maurice Bell, Mrs. A. P. Dowden, Mrs. R. J. Skidmore, Mrs. J C. Hartman, Mrs. W. F. Carter, Mrs. Owen Carroll.

The minutes of the last meeting were read and approved. Dr. Carroll made a motion, seconded by Dr. Bell, and unanimously passed that the second Tuesday of each month be the permanent meeting date for regular meetings of the Society.

It was noted that Dr. Goodwin would be the host for the November meeting.

The Secretary read a letter in regard to the repeal of the law limiting the salaries of public officials to $5,000. No action was taken.

Dr. McMunn turned the meeting over to the host, Dr. Elliston, who called on Dr. Carroll to introduce the guest speaker, Dr. H. L. Townsend, who gave a splendid talk on X-Ray work and showed numerous films demonstrating his discussion.

There being no further business the meeting adjourned

Owen Carroll, Secretary.

Harrison: The Harrison County Medical Society held its September meeting at the Biancke Tearoom, September 6, 1943, guest of the President, C. L. Swinford.

After a well-served dinner, with music, the meeting was called to order by the president.

The members and visitors present were: P. E. Blackerby, Louisville; Eslie Asbury, Cincinnati; W. R. Miner and Joe Northcutt, Covington; O. W. Brown and W. A. McKinney, Falmouth; J. M. Blades and V. W. Corbin, Butler; Tom Marks, Charles Vance, H. G. Herring, W. D. Reddish, Douglas Scott, C. D. Caywood, Charles Baker, Lexington; L. T. Layman and R. R. Linville, Mt. Olivet; J. A. Orr, J. C. Hart and George Jewell, Paris; H. R. Henry and W.

C. Grant, Winchester; B. F. Reynolds, T. P. Scott and T. H. Brown, Carlisle; A. F. Smith and H. V. Johnson, Georgetown; M. D. Sanford, Sadiesville; C. L. Swinford, J. M. Rees, J. P. Wyles, R. T. McMurtry, W. H. Carr, W. B. Moore, H. C. Blount, L. N. Todd, J. P. Chamberlin, R. L. Loftin, H. F. Midden, Cynthiana.

Several lawyers and druggists attended the dinner and meeting.

The address of welcome was made by U. S. Judge, Mac Swinford, brother of the president. Then followed a talking picture which was presented by W. T. Waller of Cincinnati, for the Mead Johnson Company, the subject being "Appendicitis in Children."

W. R. Miner read the paper on "Transurethral Resection of the Prostate Gland," and reported results on 160 operated on by this method. This paper was discussed by Drs. Douglas Scott, Vance, Johnson, Reddish, Brown, Loftin and Northcutt. The discussion was closed by Dr. Miner.

A cordial invitation was extended by P. E. Blackerby, to all the doctors, to attend the State meeting in Louisville, October 4-6.

There being no further business, the meeting adjourned.

W. B. Moore, Secretary

Jefferson: The 867th stated meeting of the Jefferson County Medical Society was held Monday evening, September 20, with 55 members and guests present. The President called the meeting to order at 8:05 P. M.

The Secretary read the minutes for the meeting on June 21 and they were approved as read.

The Secretary read a letter, received in May, from the American Medical Association concerning the difference between membership and fellowship in that Association.

O. O. Miller of the Program Committee for the Kentucky State Medical Association Meeting announced that the program will appear in the next issue of the Journal and that the speakers, brought by the Committee for War-Time Graduate Medical Meetings, are top men.

Robert Hendon, of the Radio Committee, said the situation is well in hand.

New members elected are: William S. Burton, German P. Dillon, Jr., Robert P. Kelly, Jr., Alvin B. Ortner and Richard John Wehs.

The President announced that the death of D. Y. Keith left a vacancy on the Judicial Council and that a member should be elected in his place.

James S. Lutz was nominated and a motion that the nominations be closed was made, seconded and passed and the Secretary instructed to cast the ballot electing Dr. Lutz.

The President then called upon Dr. W. W. Nicholson, Vice-President, to preside over the Scientific Program, which was as follows:

Case Report: Rocky Mountain Spotted Fever. Frank M. Stites.

Essay: Rickettsia in Kentucky, Fred W. Caudill.

Questions were submitted by Doctors Oscar Bloch, Jr., M. J. Henry, W. C. Gettelfinger, and discussion by Doctors H. M. Weeter, L. H. South, Frank Stites and F. W. Caudill.

The meeting adjourned at 9:20 P. M.

Herman Mahaffey, Secretary.

Shelby: On Thursday September 23rd Dr. B. B. Sleadd entertained the Shelby County Medical Society with a dinner at the Christian Church in Middletown.

The following members and guest were present: Drs. Sleadd, Nash, Richeson, Furnish, Bland, Carroll, Will Allen, Skaggs, Townsend, Sternberg, Morris, Dowden, Alexander, McMunn, E. S. Allen, Bell, Risk and Mr. Mayer.

After the dinner the president, Dr. M. Bell called the meeting to order. The minutes of the previous meeting were read and approved.

At this time the meeting was turned over to Dr. Sleadd, the host of the evening, and he introduced Dr. Will Allen of Louisville who spoke on the Blood Count in Appendicitis. Dr. H. L. Townsend opened the discussion from a roentgenologist view and Dr. E. S. Allen spoke on surgery. The paper was freely discussed by the members.

A motion was made to adjourn. The next meeting to be on Thursday October 2nd, when Dr. E. B. Smith will be the host.

Dr. T. E. Bland, Shelbyville, died September 25th.

C. C. Risk, Secretary.

NEWS ITEMS

Dr. Irvin Abell, Louisville, has been appointed a member of the Board of Trustees of the Southern Medical Association to fill the unexpired term of Dr. Arthur T. McCormack, Louisville, deceased, the appointment having been recently announced by the President, Dr. Harvey F. Garrison, Jackson, Mississippi. The Trustees are past presidents. The president when retiring from that office is elected to the Board of Trustees where he serves for six years. Dr. Abell was President of the Southern Medical Association 1932-1933 and a member of its Board of Trustees 1933-1939.

Dr. Lillian Askenstedt, 75, a native of Brownsboro, died in Louisville on September 25th. She was the wife of the late Dr. F. C. Askenstedt who died on June 16th. Dr. Askenstedt practiced in partnership with her husband for twenty-five years, specializing in nervous diseases. She was a graduate of Southwestern Homeopathy Medical College.

Congress appropriated $1,200,000 last winter for the Federal Emergency Maternal and Infant Care plan for Service men's wives and added $4,800,000 in July, and the House has now voted to add an additional $18,620,000 and it is waiting to be approved by the Senate.

Dr. Edmund P. Shelby, 76, a native of Kentucky but practicing in New York for forty years, and a former professor of clinical medicine at New York University, died at his home in Lexington, on September 22.

Dr. Thomas Eugene Bland, 79, former Mayor of Shelbyville, died on September 25th. He was a native of Bagdad, Ky., and was graduated from Georgetown College and University of Louisville Medical School. Dr. Bland began the practice of medicine in Shelbyville in 1892.

The Southern Medical Association meeting will be held in Cincinnati, Ohio, on November 16, 17 and 18, upon the invitation of the Campbell-Kenton County Medical Society of Kentucky. The General Chairman, Dr. James A. Ryan, Covington, the chairman of committees and most of the members of the committees are from this two-county society, in the main from Covington and Newport. It is a Kentucky meeting.

Dr. Scott McGuire of Berea, was elected Secretary of the Madison County Medical Society.

Dr. W. E. Nichols of Manchester, entered the Armed Services in 1940 and Dr. J. H. Kooser, of Hyden, entered in 1943.

Dr. Robert J. Hendon has returned to Louisville from Chicago where he took a postgraduate course while attending the American College of Physicians.

Dr. L. C. Casper, Louisville, age 60 died at SS. Mary and Elizabeth Hospital of a heart attack. He was a native of Leopold, Indiana and was graduated from the Louisville School of Medicine in 1904.

Drs. L. H. South, Hugh Leavell, and Gradie Rowntree, Louisville, and Dr. Agnes Brown, County Health Officer of Muhlenberg County, attended the meeting of the American Public Health Association in New York in October.

Dr. Charles F. McKhann, who has for several years been on the faculty of the University of Michigan, has resigned from that institution to accept a position as Assistant to the President of Parke, Davis and Company. Dr. McKhann will devote his time entirely to the scientific activities of the company. He assumed his new duties October 15.

A streamlined process of Penicillin production, resulting from two years' research in the Parke-Davis Laboratories, promises to substantially cut down the production time required, according to Homer C. Fritsch, General Manager of the Company.

The physicians of Harlan County held a meeting on February 19, 1906 in Harlan, and organized a society to be known as the Harlan County Medical Society. The following named officers were appointed: President, W. T. Nolan; Treasurer, N. S. Howard, Secretary, C. P. Bailey.

The Crittenden County Medical Society met in the Court House, Marion, April 24, 1906 and effected a permanent organization.

The following officers were elected for the remainder of the year: President, J. Ernest Fox; Vice-President, W. I. Hodges, Shady Grove; Secretary and Treasurer, W. T. Daughtrey, Marion; Delegate, J. W. Trisler, Marion.

Amebiasis: The incidence of amebiasis has been shown to be greater than was formerly supposed, and there is reason to believe that the disease may become even more prevalent when large numbers of troops begin to return home from the tropics. Surveys collected before the war revealed that more than one in ten subjects harbored E. histolytica. It would seem reasonable, therefore, that whenever intestinal symptoms form a part of the clinical picture, the diagnosis should not be considered complete until the possibility of amebiasis has been ruled out. Chronic, uncomplicated intestinal amebiasis is the most frequent type, and it includes the carrier as well as the individual with recurrent or mildly persistent symptoms. Pulvules Carbarsone, Lilly, each containing 0.25 Gm., may be given orally at the rate of one pulvule two or three times daily to a total of twenty doses (5Gm.). This routine may ordinarily be repeated several times, provided intervals of ten days are allowed between courses and the urine and liver show no evidence of damage. Bed rest is not necessary in this group.

Food experts of the Agriculture Department estimate that the diets of two-thirds of the world's people are inadequate for healthful living, even in normal peacetime. They say a program raising diets of the undernourished to minimum levels would require an expanded production of cereals by about 50 per cent; meats, fish and poultry by nearly 100 per cent; vegetable oils by about 125 per cent; milk and dairy products by about 150 per cent, and fruits and vegetables by more than 300 per cent.



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VOL. 41, NO. 12 BOWLING GREEN, KY. DECEMBER, 1943

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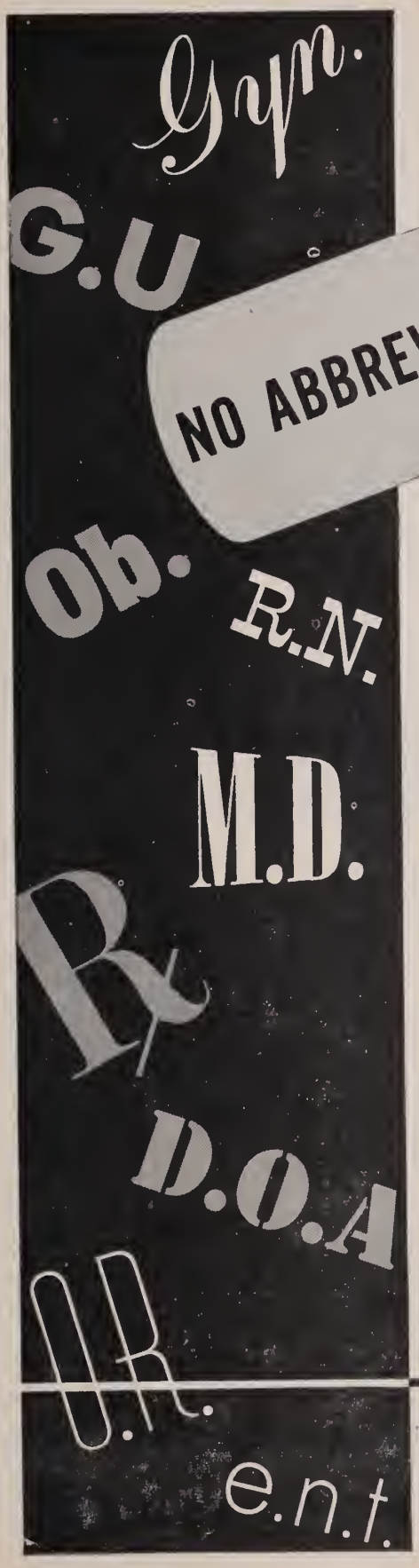
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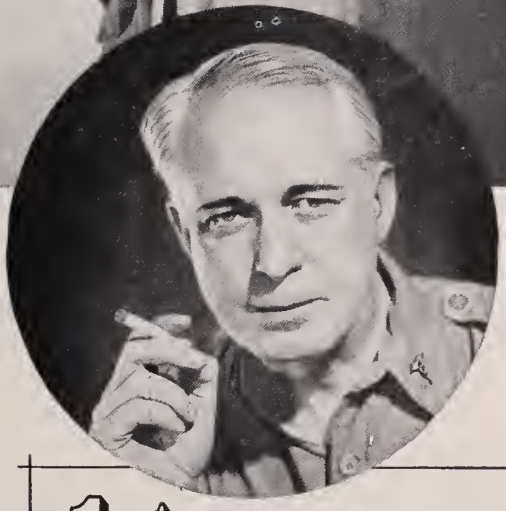
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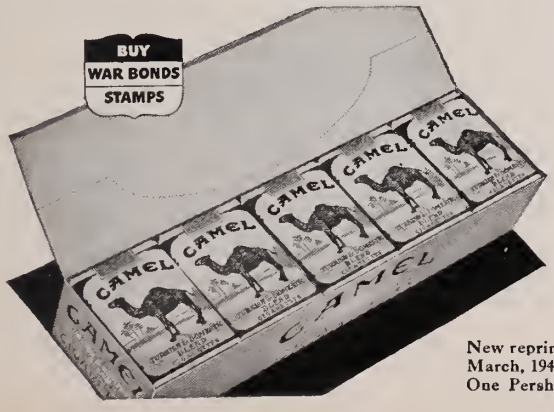


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CALENDAR OF COUNTY SOCIETY MEETINGS

COUNTY	SECRETARY	RESIDENCE	DATE
Adair	W. Todd Jefferies	Columbia	December 1
Allen	A. O. Miller	Scottsville	December 22
Anderson	J. B. Lyen	Lawrenceburg	December 6
Ballard	F. H. Russell	Wickliffe	December 14
Barren	C. R. Markwood	Glasgow	December 15
Bath	H. S. Gilmore	Owingsville	December 13
Bell	Edward S. Wilson	Pineville	December 10
Boone	R. E. Ryle	Walton	December 15
Bourbon	George M. Jewell	Paris	December 16
Boyd	R. G. Culley	Ashland	December 7
Boyle	P. C. Sanders	Danville	December 21
Bracken-Pendleton	W. A. McKenney	Falmouth	December 23
Breathitt	M. E. Hoge	Jackson	December 21
Breckinridge	J. E. Kincheloe	Hardinsburg	December 9
Bullitt	George B. Hill	Mt. Washington	
Butler	D. G. Miller, Jr.	Morgantown	December 1
Caldwell	W. L. Cash	Princeton	December 7
Calloway	J. A. Outland	Murray	December 2
Campbell-Kenton	Robert L. Biltz	Newport	December 2
Carlisle	E. E. Smith	Bardwell	December 7
Carroll	H. Carl Boylen	Carrollton	
Carter	Don E. Wilder	Grayson	December 7
Casey	Wm. J. Sweeney	Liberty	December 23
Christian	H. B. Stone	Hopkinsville	December 21
Clark	W. Carl Grant	Winchester	December 17
Clay	L. H. Wagers	Manchester	December 14
Clinton	S. F. Stephenson	Albany	December 18
Crittenden	C. G. Moreland	Marion	December 13
Cumberland	W. F. Owsley	Burkesville	December 1
Daviess	W. H. Parker	Owensboro	December 14 & 28
Estill	Virginia Wallace	Irvine	December 8
Fayette	Charles D. Cawood	Lexington	December 14
Fleming	Roy Orsburn	Flemingsburg	December 8
Floyd	Robert Sirkle	Weeksbury	December 29
Franklin	E. K. Martin	Frankfort	December 2
Fulton	John G. Samuels	Hickman	December 8
Gallatin	J. M. Stallard	Sparta	December 16
Garrard	J. E. Edwards	Lancaster	December 16
Grant	Wallace Byrd	Williamstown	December 15
Graves	H. H. Hunt	Mayfield	December 7
Grayson	E. B. Deweese	Caneyville	
Green	S. J. Simmons	Greensburg	December 6
Greenup	Virgil Skaggs	Russell	December 10
Hancock	F. M. Griffin	Hawesville	December 6
Hardin	D. E. McClure	Elizabethtown	December 9
Harlan	W. R. Parks	Harlan	December 18
Harrison	W. B. Moore	Cynthiana	December 6
Hart	Vinson Corrao	Munfordville	December 7
Henderson	Walter L. O'Nan	Henderson	December 13 & 27
Henry	Owen Carroll	New Castle	December 9
Hickman	H. E. Titsworth	Clinton	December 2
Hopkins	Wm. H. Garnier	Madisonville	December 9
Jefferson	Herman Mahaffey	Louisville	December 6 & 20
Jessamine	J. A. VanArsdall	Nicholasville	December 23
Johnson	Paul B. Hall, Act. Sec.	Paintsville	December 27
Knox	T. R. Davies	Barbourville	December 16
Laurel	Oscar D. Brock	London	December 8
Lawrence	L. S. Hayes	Louisa	December 20
Lee	A. B. Hoskins	Beattyville	December 11
Letcher	Bert C. Bach	Whitesburg	December 28
Lewis	Elwood Esham	Vanceburg	December 20
Lincoln	Lewis J. Jones	Hustonville	December 17
Livingston	T. L. Radcliffe	Smithland	
Logan	E. M. Thompson	Russellville	December 1
Lyon	H. H. Woodson	Eddyville	December 7
McCracken	Leon Higdon	Paducah	December 22
McCreary	R. M. Smith	Stearns	December 6
McLean	F. L. Johnson	Livermore	December 9
Madison	Scott McGuire, Jr.	Berea	December 16
Magoffin	Lloyd M. Hall	Salyersville	
Marion	Nelson D. Widmer	Lebanon	December 28
Marshall	S. L. Henson	Benton	December 15

COUNTY	SECRETARY	RESIDENCE	DATE
Mason	C. W. Christine	Maysville	December 8
Meade			
Menifee	E. T. Riley	Frenchburg	
Mercer	J. Tom Price	Harrodsburg	December 14
Metcalfe	E. S. Dunham	Edmonton	December 7
Monroe	[illegible] E. Bushong	Tompkinsville	
Montgomery	D. H. Bush	Mt. Sterling	December 14
Muhlenberg	Claude Wilson	Greenville	December 14
Nelson	Keith Crume	Bardstown	December 15
Nicholas	T. P. Scott	Carlisle	December 20
Ohio	Oscar Allen	McHenry	December 1
Owen	K. S. McBee	Owenton	Decem e
Owsley	W. H. Gibson	Booneville	December 6
Perry	Lewis C. Coleman	Hazard	December 1
Pike	S. B. Casebolt	Pikeville	December 2
Powell	I. W. Johnson	Stanton	December 6
Pulaski	Robert G. Richardson	Somerset	December 9
Robertson	Logan T. Lanham	Mt. Olivet	
Rockcastle	Robert G. Webb	Livingston	December 3
Rowan	I. M. Garred	Morehead	December 13
Russell	J. R. Popplewell	Jamestown	December 13
Scott	A. F. Smith	Georgetown	December 2
Shelby	C. C. Risk	Shelbyville	Decem er 16
Simpson	N. C. Witt	Franklin	December 14
Spencer	M. H. Skaggs	Taylorsville	
Taylor	L. S. Hall	Campbellsville	December 9
Todd	B. E. Boone, Jr.	Elkton	December 1
Trigg	Elias Futrell	Cadiz	
Union	E. Bruce Underwood	Morganfield	December 7
Warren-Edmonson	John H. Blackburn	Bowling Green	December 8
Washington	J. H. Hopper	Willisburg	December 15
Wayne	Frank L. Duncan	Monticello	
Webster	C. M. Smith	Dixon	December 31
Whitley	C. A. Moss	Williamsburg	
Wolfe	John L. Cox	Campton	December 6
Woodford	George H. Gregory	Versailles	December 2

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PRESIDENT KENTUCKY STATE MEDICAL ASSOCIATION, 1943

KENTUCKY MEDICAL JOURNAL

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

VOL. 41, NO. 12 BOWLING GREEN, KY. DECEMBER, 1943

OUR PRESIDENT

To succeed the late Doctor C. C. Turner, who would have taken office as President of the Association this year, the House of Delegates unanimously elected Doctor Van A. Stilley of Benton, Kentucky. He was inducted on the second day of the Meeting and presided over the Scientific Sessions.

Doctor Stilley had been Councilor of the First District for twenty-one years. During all this time and for many years previous he was a regular attendant upon the meetings of the State Association and probably has as wide an acquaintance throughout the State as any other physician.

He graduated from the Medical Department, University of Louisville, in 1890. He was Secretary of the Marshall County Medical Society for five years, 1900 to 1905, and President of that Society in 1906. He served as Health Officer of Marshall County for thirty-one years, 1893 to 1924. He served as Secretary of the Southwestern Kentucky Medical Association for six years, 1901 to 1907, and was elected its President in 1908. He has been Field Director and Public Health Consultant for the State Department of Health for fifteen years and has endeared himself to everyone with whom he has worked.

The new President is one of the most popular physicians in Kentucky and was sponsored for the position by the entire delegation of Western Kentucky. Modest and unassuming, Doctor Stilley has the faculty of not only making friends but holding them with their full confidence in his loyalties. Professionally, he has always stood for the highest and best in medicine and has, at all times been ready to advance ethical and professional standards. The profession of Kentucky has honored itself in elevating this "Doctor of the Old School," to the Presidency of the Association.

Immediately after presiding over the Annual Meeting, Doctor Stilley returned home ill and was later taken to Chicago, where he was operated upon by Doctor Herman L. Kretschmer, President of the American Medical Association. The operation was entirely successful and Doctor Stilley is again at home, convalescing and seeing his numerous friends. He has the best wishes of Kentucky doctors for a complete recovery and a continued useful career.

KENTUCKY DOCTORS HONORED

Doctor James A. Ryan, of Covington, prominent as a surgeon and one of the most popular doctors of Northern Kentucky, was elected Vice President of the Southern Medical Association at its recent Annual Meeting in Cincinnati. He was General Chairman of the Committee on Arrangements for the host societies and the success of the meeting may be largely credited to him. Doctor Ryan has been a familiar figure at the meetings of the Kentucky State Medical Association for a great many years and is held in high esteem by doctors all over the State. He is a worthy representative of Kentucky medicine and we may well be proud of this new recognition.

Major David Woolfolk Barrow, of Lexington, now with the U. S. Army Medical Corps, Station Hospital, Eglin Field, Florida, received the first prize for Scientific Exhibits at the Southern Medical Association Meeting. This was a chart and graph exhibit illustrating the results of a violent explosion involving some two hundred men, more than fifty of whom were killed or injured. The exhibit attracted a great deal of attention and Doctor Barrow distinguished himself in the presentation of it. The members of the Association will recall that Doctor Barrow has, on numerous occasions, presented interesting Scientific Exhibits at our State meetings.

DOCTORS IN SERVICE

It is fitting that some of the misunderstandings prevailing among the members of the profession should be dissipated to the extent that the Surgeon General of the Army and his ranking officers be relieved of unfair criticism in regard to the need for additional medical personnel. Commenting upon these needs, in a recent address before the Wisconsin State Medical Society, Colonel Walter B. Martin, Medical Consultant, Fifth Service Command, Fort Hayes, Columbus, Ohio, may be quoted in part, as follows:

"There are those who still question the need of so many doctors and nurses in the Army and who can tell you of how many doctors they know in the Service are now wasting their time in idleness. The truth is quite different. The Army medical organization has been built up to provide good care for the soldier, all the way from his Induction Center to the battlefield and back from the battlefield to the Base Hospitals in this country. The training is long and arduous for Medical Units and requires definite and detailed technical training just as do a tank or machine gun battalion. These doctors and nurses who are rendering such splendid service all along the line entered the Army as good doctors and nurses but had to be trained to be good medical officers. The time spent in their training has not been wasted as is shown by the remarkable results that are being obtained in the care and prevention of disease and in the treatment of the wounded. Less than 3% of the wounded in this War are dying of their wounds as contrasted to 7.73% in World War I. The treatment and care that our soldiers have received from the battlefield to the General Hospitals is skillful and efficient and has resulted in the saving of thousands of lives. The entire story to date is a thrilling one of which the profession may well be proud. The Armed Forces have drawn heavily on our medical resources but they have used this material well. The Medical Service of an Army is as important from the military standpoint as are the mighty fleets on the sea and in the air, or the massed guns upon the ground. Only by having ample and effective medical service can we hope for military success. When this War is over, when the last campaign is finished, the last march is ended, the story of our bitter struggle and our triumphs will be written. On the proud pages of that record the accomplishments of the Medical Department will not rank below those of any other branch of the Army. Only on those who shirk their duty now will this glory never shine."

While in attendance upon the recent meeting of the Kentucky State Medical Association, Colonel Martin, in addressing a small group on Army needs, used this illustration:

"Many doctors, seemingly not busy, may be likened to firemen in a City Fire Station. They may have time to play Checkers, but it would be a tragedy if they were not available when a conflagration threatened or existed."

UNSATISFACTORY

From January 1, to August 1, 1943 an aggregate of 9,805 blood specimens from applicants for marriage licenses, were sent by physicians to the State Department of Health Laboratory for examination. Of the total, 481, or approximately five per cent, were positive; 1,111 were unsatisfactory. These "unsatisfactory" specimens could not be examined, for many reasons: they were broken, were not accompanied by history slip, were hemolyzed, lost in the mail through top coming off the container; were chylous (specimen taken too soon after eating), insufficient amount (two cubic centimeters is the desired amount of blood) and omission of identification on history slip. Strange to say, some of the containers contained no specimen at all—only the history slip, substituting a cotton plug, which absorbs all the blood, for the cork stopper.

This means that 1,111 patients had to return to their respective doctors for rechecking histories and taking second specimen of blood. The doctors were thus made to waste precious time which could have been devoted to the prevention of disease or curing of the sick, and a postage bill of approximately $60.00 which had to be borne by the physician.

At this season it should also be borne in mind that blood specimens are not always promptly delivered during the Christmas rush; sometimes a full week lapses before receipt of a specimen mailed only one hundred miles away. In view of these facts, people planning to marry at this season of the year and depending on reports from the State Health Laboratory for securing the license, are urged to seek the services in advance of the holidays.

OFFICIAL ANNOUNCEMENTS

Minutes of the Ninety-Third Annual Session of the Kentucky State Medical Association Held at Louisville

October 5, 6, 1943

SCIENTIFIC SESSION

Tuesday Morning, October 5

The opening session of the Ninety-Third Annual Meeting of the Kentucky State Medical Association, designated as the Cyprian Peter Mattingly Memorial Meeting, and held in the Crystal Ball Room of the Brown Hotel, Louisville, October 4-6, 1943, was called to order at 9:20 a. m., E. M. Howard, Harlan, President of the Association, presiding.

President Howard: The meeting will come to order, please. I will ask the members and guests to stand while we have the invocation by Dr. Short, President of the Ministerial Association, Louisville.

Reverend Roy H. Short: Our gracious heavenly Father, we pause this morning to acknowledge Thee as our Lord and our God. Thou hast made us; we are Thy people and sheep of Thy pasture. Thou art the Lord of our fathers unto whom all the ages have looked, and Thou art our God this morning, and in all of our ways we would acknowledge Thee in full confidence that Thou wilt direct our paths. We pray Thy blessing upon these men and women who are gathered together here these days. We thank Thee for the great profession that they represent and for their ministry of blessing to suffering humanity everywhere. As they go about their work in these days of tension and of strain, we pray that Thou wilt give to them the strength and power and courage they need.

As we pause in Thy presence, our Father, we remember our own land, particularly in these days of world turmoil, and we pray for all of your young men and young women in the service who are scattered to the far corners of the earth. We are so glad to know this morning that wherever they may be, though they may be very far from us, they cannot be very far from Thee, and we pray Thy blessing upon them. We pray that Thou wilt stay them and keep them and strengthen their hearts and let them have the confidence that Thou art by their side.

We pray for our own land and its interests and the cause of liberty that lies so dear to the hearts of all of us. Give guidance to those who rule over us, and lead us, we pray, to victory and make us a people who are worthy of victory and who can build a world in which brotherhood obtains. Hasten the day, we pray, when wars shall cease unto the end of the earth, when men shall dwell together in righteousness. O, may Thy Kingdom and Thy will be done on earth as it is in Heaven. We pray in the Redeemer's name. Amen.

President Howard: The time has come for me to retire as your President. I want to say that it has been a pleasure to serve as the President of your Association. I want also to express my deep feeling and sense of appreciation of the responsibility and cooperation of my associates. We have not accomplished so much, but we have been in there trying, and with the fine spirit of cooperation that I have had from the members and the other officers and the various committees. I feel that we have done a great deal.

It is with a note of sadness in a way, because of things that have happened in the last twelve months, that I retire as President, and at the same time it is with a feeling of relief to place the responsibility on the shoulders of the gentleman who succeeds me.

At this time I introduce to you your incoming President, Dr. V. A. Stilley. He is a man who has served his Association for so many years that we know not how long, faithfully, conscientiously, always trying to do all in his power for the upbuilding of this Association, and it is a fine thing that we can go to the Western part of the state and find a man of Dr. Stilley's type to be the President the next twelve months.

V. A. Stilley, Benton: It is indeed a pleasure to me to try to be President of the Kentucky State Medical Association. I realize the responsibility is great, and I realize that I am not capable of being the President that I would like to be, but with your help and the help of the members of the medical profession who have worked together for years and years, we may make some progress, at least when it comes to organized medicine and the betterment of public health.

One of the main objectives of my predecessor was a tuberculosis prevention and treatment program. I had a small part in organizing the first county in the state to have the rural teachers examined for tuberculosis. I inaugurated that pro-

gram about fifteen years ago, when we asked every single teacher to have an examination for tuberculosis, and we have carried that out ever since. Now there is not a county in the state where we have a full-time health department in which that is not one of the requirements. That has been the main part of the contract that the schools have made with the teachers, that they would be examined for tuberculosis.

Some of them have had some rather sad experiences in tuberculosis. Twenty-five years ago I wrote a paper for the Kentucky State Medical Association in which I advocated that all the schools have a full-time medical examiner and that every single student be examined for tuberculosis, and not only for tuberculosis but have a thorough physical examination. That covered not only the students, but I advocated that the boarding-house keepers and all the inmates of the boarding houses be examined for tuberculosis. In those days there were three or four students and boys in a room, and that may still be the case. In that paper I advocated that every boy be examined thoroughly by a competent man. Also, that the premises should be examined and everything be in as sanitary condition as possible. I know of two boys, one from California, one from Kentucky, both of whom were apparently healthy. Each was a good student and stood at the head of his class. One of the boys began to get a little bit hoarse. He was treated for a while and seemed to get better, but in a short time he had a relapse, and during the second term he was finally examined and they found that he had tubercular laryngitis. If that boy had been examined early, as he should have been, I think he could have avoided a premature death and could have been useful in his life.

That was one of the things that I tried to do, even twenty-five years ago. We all know that we would not want our child to go to a tubercular teacher. In some schools, some teachers actually have had tuberculosis who did not want to be examined. Some resigned, but that was made a part of the contract.

I believe that we have made some contribution in that sense toward the handling of tuberculosis. We know that it is a great menace. Dr. Howard's idea is an excellent one of having three tuberculosis sanitaria, one in the western, one in the central and one in the eastern part of the state. I think there is nothing better that the medical profession can do toward the betterment of the health of Kentucky than to have institutions of this kind. It is too far from the eastern part to come here, and too far to come from the extreme western part. We have had wonderful help from the Governor in the institution that we have out here at Hazelwood, and if we can convince the people at home that we ought to get these institutions, I think we probably will get about what we want.

I am going to make one more personal reference. We have down in our end of the state a dam, and they are building a lake down there anywhere from two miles wide to fifteen to twenty miles long. The TVA has built a splendid little village, with about eighty-four houses and a recreation hall; it has a nice modern little hospital, and about a year from now, if plans work out as they should, those houses will be for sale. They have good streets, good sewerage and pure water. The houses are electrically heated and lighted. So far as I know, there couldn't be a better place to put a sanitarium. When the Tennessee Valley Authority completes that dam it will be, to my mind, one of the best places anywhere in the country.

Again I want to thank you. I believe in organized medicine. I am glad to be a country doctor, and I want to go ahead and carry out the policies that were planned for years by Dr. McCormack. (Applause.)

We will now have Greetings from Dr. B. Wilson Smock, and a report of the Committee on Arrangements.

B. Wilson Smock, Louisville: As President of your host society, the Jefferson County Medical Society, it is my privilege and pleasure to extend to you a most cordial and sincere greeting and welcome. It is true that our number has been greatly cut down by the stars in our service flag of the State Association. Quite a few of those stars are for the members of our society. While our membership has been cut, we feel that the hospitality which we are able to extend to you at this time will not be in the least bit diminished.

There has been a scientific program arranged for this meeting second to none, and for this we are indebted to E. L. Henderson, Past President of the Association, and Oscar Miller.

Due to the fact that the meeting has been cut one day, the entertainment has

consequently been curtailed. However, there has been provision made for entertainment during the meeting, and with the privilege of the Chair I would like to ask Harry M. Weeter, President-Elect of the Jefferson County Medical Society, to tell you at this time something about the entertainment program for the next two days.

HARRY M. WEETER, Louisville: Following the spirit of the times we have eliminated much of the entertainment. However, we have some limited amount, both for the doctors and for the ladies. First, for the members of the State Association and our guests the Jefferson County Society will be host to you this evening at 6:00 o'clock in the Louis XVI Room on this floor. At this social hour, the Entertainment Committee has concocted certain anti-rheumatic solutions which do not appear in the U.S.P. They are not approved as new remedies, however, for meetings of this kind; they are official.

At 6:45 p. m. in the Crystal Ball Room will be the Annual Subscription Dinner. Tickets for that dinner are two dollars and can be obtained at the registration desk. It is desirable that as many as possible secure their tickets during the day so that the hotel management can better handle the number who expect to be present.

Next, for the Woman's Auxiliary, at noon today on the Roof Garden the Jefferson County Medical Society will be host to the Woman's Auxiliary at a luncheon in honor of the President of the Woman's Auxiliary of the American Medical Association, Mrs. Eban J. Carey.

Tomorrow afternoon, from 3:00 to 5:00 o'clock at the home of Mrs. E. L. Henderson, a tea will be given by Mrs. Henderson and Mrs. Smock.

The following papers were presented:

Burns, by Lieutenant Colonel Claude S. Beck, Cleveland.

Shock, by Eugene A. Stead, Jr., Atlanta, Ga.

Blood Derivatives, by Roy R. Kracke, Atlanta, Ga.

Current Trends in Military Surgery, by Brigadier General Fred W. Rankin, Washington, D. C.

The Oration in Medicine, Medical Problems in Kentucky, was given by Charles B. Stacey, Pineville.

The meeting recessed at 12:45 p. m.

SCIENTIFIC SESSION
Tuesday Afternoon, October 5

The meeting was called to order at 2:00 p. m. by President Stilley.

The following papers were presented:

Chemotherapy in Digestive Organs, by J. A. Bargen, Rochester, Minn.

Chemotherapy: (a) in Genito-Urinary Infections; (b) General Consideration, by A. E. Brown, Rochester, Minn.

The Preoperative and Postoperative Use of Sulfonamides and the Prevention of Wound Infections, by J. A. Bargen. Rochester, Minn.

The Treatment of Bacterial Meningitis, by A. E. Brown, Rochester, Minn.

Medical and Surgical Diseases of the Prostate Gland, by Herman L. Kretschmer, Chicago, Illinois.

The meeting recessed at 4:25 p. m.

ANNUAL SUBSCRIPTION DINNER
Tuesday, October 8

The Annual Subscription Dinner was held in the Crystal Ball Room at 6:45 p. m., E. L. Henderson, Louisville, acting as Toastmaster.

Dr. E. L. Henderson paid a tribute to the memory of Arthur T. McCormack, to C. C. Turner, and the 72 members of the Association lost by death during the year.

Dr. E. L. Henderson introduced the distinguished guests.

A surgical kit was presented by Miss Cox of Bundles of America to Lieutenant Commander Eberhart of the U. S. Navy.

There were addresses by Honorable Keen Johnson, Governor of Kentucky; by Brigadier General David N. W. Grant, Washington, D. C., on "We Are Not Content"; Air Marshal Sir Harold Whittingham, Director General of the Medical Service of the Royal Air Force: and Herman L. Kretschmer, Chicago, Ill., President-Elect, American Medical Association.

The meeting adjourned at 10:20 p. m.

SCIENTIFIC SESSION
Wednesday Morning, October 6

The meeting convened at 9:50 a. m., President Stilley presiding.

The following papers were read:

Gastric and Duodenal Ulcers; Surgical Management, by A. W. Allen, Boston, Mass.

Gas Gangrene, W. H. Cole, Chicago, Ill., Gas Gangrene. Neurovascular Lesions of the Extremities, by A. W. Allen, Boston, Mass.

Intestinal Obstruction, by W. H. Cole, Chicago, Ill.

The Oration in Surgery, "Where To, Surgery?" was given by B. Wilson Smock, Louisville.

The meeting recessed at 12:15 p. m.

SCIENTIFIC SESSION

Wednesday Afternoon, October 6

The meeting was called to order at 1:30 p. m. by President Stilley.

The following papers were presented:

Classification of Dysenteries, and Bacillary Dysentery, by E. L. Turner, Nashville, Tenn.

Thrombophlebitis and Pulmonary Embolism, by A. W. Allen, Boston, Mass.

Amebiasis, Other Intestinal Protozoal Infections, and Helminthous Dysentery, by E. L. Turner, Nashville, Tenn.

The meeting adjourned sine die at 4:20 p. m.

MINUTES OF THE NINETY-THIRD ANNUAL SESSION OF THE HOUSE OF DELEGATES OF KENTUCKY STATE MEDICAL ASSOCIATION HELD AT LOUISVILLE OCTOBER 4-6, 1943

FIRST SESSION

Monday Morning, October 4, 1943

The first meeting of the House of Delegates of the Kentucky State Medical Association, held during the Ninety-Third Annual Session October 4-6, 1943, at the Brown Hotel, Louisville, convened at 10:10 a. m., the President, E. M. Howard, Harlan, presiding.

PRESIDENT HOWARD: The House of Delegates will now come to order and we will proceed with the business as scheduled in the program that you all have before you.

The first order of business is the report of the Committee on Credentials, by J. Sam Brown, Ghent.

SECRETARY BLACKERBY: Mr. Chairman, Dr. Brown is not present. I guess you will have to postpone that until he comes in with his report.

SAM C. SMITH, Ashland: You have to have it before you have the election of officers.

PRESIDENT HOWARD: If it meets with the approval of the House of Delegates, we will go along with the roll call by the Secretary while we are waiting for Dr. Brown's report.

The Secretary called the roll and a quorum was present.

JAMES S. LUTZ, Louisville: As a member of the Credentials Committee I move the credentials be accepted by the House.

PRESIDENT HOWARD: Dr. Lutz, as a member of the Credentials Committee, moves that the credentials be accepted.

The motion was seconded.

PRESIDENT HOWARD: Before they are accepted, I want to call your attention to the fact that Drs. John Scott, H. G. Reynolds, Frank Boyd, E. L. Henderson, W. E. Gardner, W. E. Gary, Past Presidents, are with us, and they will be included.

A motion has been made and seconded that the report of the Credentials Committee be accepted. All in favor signify by saying "aye"; opposed the same sign, the motion is carried. We will now have the minutes of the 1942 meeting.

W. E. GARY, Hopkinsville: I move the reading of the minutes of the 1942 meeting be dispensed with.

The motion was regularly seconded and carried.

SECRETARY BLACKERBY: They are in the December 1942 Journal.

PRESIDENT HOWARD: We come to realize just what can happen in a year. Last year we elected a gentleman who is not present to be installed this year, Dr. C. C. Turner, who has passed on.

In addition to that we have had another serious loss, one that grieves us all, the loss of Dr. McCormack, which is another one of the reminders to all of us that we can't all be here forever.

We have the matter of electing a President to succeed Dr. C. C. Turner, or rather to be installed in his stead. Motions are in order now for nominations for President.

FRANK BOYD, Paducah: I wish to nominate a man who has been a member of this society for many years and has been Councilor for the past twenty-five or thirty years, who has always stood up for the profession and has been a faithful worker. He is from Western Kentucky. I wish to place in nomination Dr. Van A. Stilley, of Benton.

H. H. HUNT, Mayfield: As a representative of West Kentucky, I desire to second the nomination of Dr. Stilley and also to amend it to close the nominations. (Seconded.)

T. ATCHISON FRAZER, Marion: This is a sad meeting of this House of Delegates. As I look into your faces, it seems like just a few years when we saw sitting around as delegates such men as Richmond, Shirley, Carpenter, Wathen, these patriots who have gone long before and who made medical history for Kentucky. As the President said, we hardly realize how fast we are going until we stop and reflect on

the past twelve months. Dr. Turner, a vigorous young man who looked as if he was good for many years, was elected President of this society, which was an honor to the society and to Kentucky, and he is gone; and, as Dr. Howard has said, our beloved McCormack has passed on. It is well for us to reflect upon those things occasionally, because we don't realize how fast time is carrying us on.

Dr. Stilley and I have been personal friends for years and years, we have grown old together. He is one of the most delightful characters I have ever known, one of the truest friends I have ever had, and one of the most faithful workers among the doctors in the State of Kentucky. Perhaps we wouldn't have representation from our county to answer the roll call except for Van Stilley, and I want to second his nomination.

President Howard: You have heard the motion by Dr. Boyd and the seconds by Dr. Frazer and Dr. Hunt, who included an amendment asking that the nominations close. We will now vote on the amendment. All in favor that nominations close, let it be known by saying "aye"; contrary the same sign. The motion is carried and the nominations are closed.

The Secretary, I believe, will be instructed to cast the ballot of the entire delegation for Dr. Stilley.

Sam C. Smith, Ashland: I make a motion that the Secretary be instructed to cast the ballot for President-Elect of the Kentucky State Medical Association.

The motion was seconded by E. L. Henderson, Louisville.

President Howard: A motion is made and seconded that the Secretary cast the ballot for President-Elect. All in favor say "aye"; all opposed by the same sign. The motion is carried, and Dr. Stilley is elected.

T. A. Frazer: I suggest that you appoint a committee to notify Dr. Stilley and to bring him before the House of Delegates.

The motion was seconded and carried.

President Howard: I will appoint on that committee, T. A. Frazer, Frank Boyd and H. H. Hunt.

The committee escorted Dr. Stilley into the room.

President Howard: Gentlemen, your President-Elect. V. A. Stilley. (Applause.)

V. A. Stilley, Benton: I feel very, very proud to be honored with the presidency of the Kentucky State Medical Association. At the same time, I feel very humble by reason of the fact that I know that I am not capable of leading this Association. I do believe in organized medicine. I am a country doctor, and I believe in country doctors, and I want us all this year to try to do more than we have done heretofore, and with that I think my minute is up. I thank you. (Applause.)

President Howard: We will now have the report of the Committee on Scientific Work, by O. O. Miller.

Report of Committee on Scientific Work

O. O. Miller, Louisville: The Committee on Scientific Work, in conjunction with the committee selected to prepare the program, have made a radical departure from previous meetings. Since many of the national associations have refrained from holding meetings during the war effort, the American Medical Association, the American College of Physicians and the American College of Surgeons have provided funds and speakers to present scientific papers before the various meetings and Army camps. Your committee thought it would be advisable to use this group for the scientific program this year.

After several meetings, the Committee, in conjunction with the War-time Medical Meetings Committee, selected the topics they thought would suit the needs of our profession, as well as the military hospitals and camps. The regional chairman, Dr. E. L. Henderson, through his contacts, was able to have some of the outstanding men in the country accept assignments on the program. With full approval of your committee he had considerable correspondence with the various representatives, and spent a great deal of time in arranging for the speakers to come to Louisville.

A perusal of the program indicates how well your committee has succeeded, and this should be one of the most outstanding meetings the Association has ever had. With this type of program, it is not contemplated to have any discussion, other than to ask questions from the floor to elucidate some points that may not be clear to the members. These lectures will be taken in stenotype and published in the Journal at a later date.

The Program Committee on Scientific Work consisted of E. L. Henderson, Frederick G. Speidel, Harry W. Weeter, and Oscar O. Miller, Chairman, who cooperated with the Regional Wartime Meetings Committee.

J. H. Blackburn, Bowling Green: I move the report be accepted.

The motion was seconded and carried.

President Howard: We will have the report of the Committee on Arrangements by B. W. Smock, Chairman.

Report of Committee on Arrangements

B. W. Smock, Louisville: This year it has been rather difficult to organize a committee on arrangements, as a number of the counties' ranks have been depleted by the inroads of the Army. The Jefferson County membership has been cut down greatly. We have arranged a program which we hope meets with your approval. The meeting has been shortened a day, and therefore some of the social activities have been eliminated.

This evening, the House of Delegates, the Council, the Alternates and guests are to be entertained by our President, Dr. Howard. (Applause.)

Tomorrow at noon, the Woman's Auxiliary will be entertained by the Jefferson County Medical Society. Wednesday afternoon there will be a tea. Tuesday noon the guest program speakers are to be the luncheon guests of Dr. Howard. Tomorrow evening we will have the subscription dinner. An hour before the dinner, Jefferson County will be your host at refreshments in this room.

You have noticed in the program the reception committees that have been appointed. Any of these men are at your service at any time. They will be glad to provide any transportation that you or your ladies care to make use of. Dr. John Clem heads the Press Committee, which has functioned very well indeed before the meeting and I am sure will during the meeting, and at any time during the meeting that we of the Jefferson County Medical Society can serve you, we stand ready to do so. Don't hesitate to call upon us. (Applause.)

E. L. Henderson, Louisville: General David N. W. Grant telephoned me, Saturday that he had visiting him the Director General of the Medical Service of the Royal Air Force of Great Britain, Air Marshal Sir Harold Whittingham. He will be at the dinner tomorrow evening and will make a talk at that time off the record. I think that will be a real treat, and anyone who doesn't attend will be making a mistake; this distinguished gentleman is visiting the country at the request of the War Department, and he has very kindly agreed to come down here and talk to us.

President Howard: At this time we will spend just a few minutes on the President's report.

Report of the President

Last year I announced to this House of Delegates that your President wanted the Association to make something a major objective. Our Association is doing a lot of things, we have accomplished much in the past, we are still accomplishing things. I asked that we make as our major objective, the problem of tuberculosis, with the end in view that I would visit every county in the state during the year 1943, which I promised to do and expected to do. The rationing came on and it didn't seem that it was a suitable time to do any more than was necessary. Instead, we concentrated our efforts in another direction.

At this time I want to pause to give full credit to all the committees that have worked so faithfully in the year 1943. They have worked energetically and have done a lot of good work.

The Committee on Tuberculosis, together with our leader, Dr. Arthur McCormack, and with what aid and assistance I could give by spurring them on as much as possible, has really accomplished something. We got the Governor interested in our program and in doing something about the tuberculosis problem. The committee visited the Governor at Frankfort. They took lantern slides and statistical reports and showed him what the needs were in the matter of tuberculosis. They were successful in convincing him that something should be done. They succeeded in getting him to go to Hazelwood and see the lack of facilities for the care of people who have tuberculosis and need hospitalization.

Following that, our Governor gave us the sum of $600,000 to construct an additional building at Hazelwood on condition that we could get priorities through at Washington. Priorities were obtained, the contract was let, and the building is now under construction. (Applause.)

You all know of the addition to the State Health Building here, which has been completed, and is now being occupied.

The Health Center of the City of Louisville is completed, a magnificent and useful building, finished and ready for occupancy.

The Health Center at the City of Henderson, a model health center at a cost of about $65,000, has been finished, dedicated

and is being occupied. It is our dream that we may have a health center similar to that in every county in the State of Kentucky. If we work hard enough, if we concentrate on these problems we can accomplish our aims.

This morning, our State Health Board had a meeting and voted to accept the Government's proposition to put in a venereal center at the Fair Grounds, to cost about $140,000 for the treatment of syphilis.

This year 1943 has seen quite a bit of activity in our Association, and we are proud of it.

In the matter of the tuberculosis problem, we are just starting. We know better than the public that our people are dying daily. Every year takes an enormous toll of people from tuberculosis in the State of Kentucky. The fact that we know so much more about it than the public puts the responsibility so much more heavily on our shoulders. I will never be satisfied until we have sufficient facilities in Eastern Kentucky, Western Kentuucky and Northern Kentucky and Southern Kentucky to take care of all the people in our State who are afflicted with tuberculosis to the point that they are infectious and should be hospitalized.

I know of nothing else especially at this time to report to this House of Delegates. (Applause.)

W. E. Gardner, Louisville: Is it appropriate to have a motion to accept the report of the President, or is that automatic?

H. H. Hunt, Mayfield: I make a motion to accept the report of the President.

The motion was seconded.

W. E. Gardner: I would like to amend that by saying that the Society extends its congratulations to Dr. Howard upon the success of his accomplishments.

H. H. Hunt: I accept the amendment.

The motion as amended was put by C. A. Vance, Chairman of the Council, and carried unanimously.

President Howard: Thank you.

It has been called to my attention that the Woman's Auxiliary is ready to make its report, Mrs. Floyd.

Report of Woman's Auxiliary

Mrs. John B. Floyd, Richmond: I have the honor to bring a report from your Auxiliary and to read it.

The program for the year was designated to supplement the activities of the Kentucky State Medical Association and the State Department of Health of Kentucky. Its chief objectives were:

1. To assist in the fight to control venereal diseases by strict enforcement of the laws and regulations directed to checking their spread.

2. To intensify efforts for tuberculosis control.

3. To urge Auxiliaries throughout the state to stimulate their members to take Red Cross courses in nutrition, first aid, home nursing, nurses' aide training, etc.

4. To promote the sale of War Bonds and Saving Stamps.

In connection with the first three objectives, Mrs. John G. South, Chairman of Public Relations, addressed an aggregate of thirty-three organizations and clubs. She also put on at Frankfort a three-day Health Institute, in the conduct of which thirty-three local organizations actively participated. Similar institutes have been requested by Corbin, Somerset, Williamsburg and Lancaster for this fall.

At the annual meeting of the Woman's Auxiliary to the American Medical Association, held in Chicago last June, and which the President of the Auxiliary attended, a resolution was passed creating a new committee, to be known as the War Participation Committee. The National Advisory Council suggested the title, as the constituent State Medical Associations all have committees with similar titles. In this way, it was thought that the work of the Auxiliary's committee could be tied up more closely with the activities of the various state committees engaged in war participation. Through this committee it is hoped so to unify the efforts of Auxiliary members that they will function as a group rather than as individuals. Immediately after Pearl Harbor, my predecessor in the presidency of the Auxiliary presented to the members a program almost identical with the one now offered by the national organization. This year, following a plan successfully adopted by the Woman's Auxiliary to the Fulton County (Georgia) Medical Society, it was offered again, under the title of "Doctors' Aides."

This year, defense work has taken precedence over the usual peacetime Auxiliary activities. The most of these activities, however, have, with the exception of a few Auxiliaries, been carried by individuals as such rather than in Auxiliary groups.

Organization: Because of the war emergency and the consequent restrictions on rubber and gasoline, travel in connection with organization activities

has been discontinued for the duration. For this reason, there are no new organizations to report. Two Auxiliaries, we regret to state, have been disbanded for the duration. Some of the members of these have moved out of the state; others have joined as state-at-large members. At the request of the President of the Woman's Auxiliary to the Illinois State Medical Association, invitations to attend the annual Kentucky State Medical Association meeting have been issued to three former members whose husbands are now located at Army Camps in Kentucky.

Radio: All radio talks during the year were based on Health in Wartime. Dr. Robert Hendon spoke over WAVE on "Rationing Doctors." Dr. Oscar Miller delivered an address over WINN on Doctor's Day, April 13, on "How to Avoid Rationing Doctors." On last December 13, Jane Todd Crawford Day, Mrs. Christine Bradley South spoke on "A Healthy State." Spot announcements were made throughout the day.

Quarterly: The Quarterly, published four times a year by the Auxiliary as a supplement to the Kentucky Medical Journal, was discontinued for the duration. However, the Journal generously offered to carry a few pages of Auxiliary news each quarter during the year. For this courtesy we are very grateful to the Journal and the Association.

Jane Todd Crawford Memorial: The Auxiliary sponsored, through the courtesy of John Wyeth & Brother, Inc., Philadelphia, an exhibit of Dean Cornwell's series of American Medical Paintings. Of especial interest to us was the painting depicting Dr. Ephraim McDowell about to perform on Jane Todd Crawford the first ovariotomy. This painting, it is rumored, may eventually be presented to the Commonwealth of Kentucky. A special issue of the Woman's Auxiliary section of the Kentucky Medical Journal (the last published), containing the story of Jane Todd Crawford by George Madden Martin, was published and presented to the Auxiliary through the courtesy of John Wyeth & Brother, Inc.

Work on the Jane Todd Crawford Trail is at a standstill for the duration.

The Auxiliary is proud to report one of the members has been named Kentucky State Mother of 1943 by the American Mothers Committee of the Golden Rule Foundation of New York City. She is Mrs. Matthew C. Darnell, of Frankfort. (Applause.)

Secretary Blackerby: I move the adoption of the report of the Auxiliary as an expression of appreciation for their work.

The motion was seconded and carried unanimously.

President Howard: The report of the Council is next:

Secretary Blackerby: I would like to call attention of the House of Delegates to the fact that Dr. D. M. Griffith, Councilor for the Second District resigned on April 2nd, 1943 and the Council on April 24th, 1943 appointed Dr. E. L. Gates, Greenville, to fill out his term which expires in 1945.

Report of the Council

C. A. Vance, Lexington: In submitting the report of the Council this year we have to call attention to circumstances which have had no parallel in the history of the Association. Our President-Elect, C. C. Turner, was suddenly taken from us on February 28, at the very height of a career of usefulness to his people and to his profession; later, on August 7, our Secretary, Arthur Thomas McCormack, passed to his reward after serving the Association for thirty-six years with an unbroken record as Secretary of the Association and Editor of the Journal. While these events will have been given due notice in our Journal, the Council desires to go on record as expressing deep regret at the loss of these two faithful servants of our profession.

Inasmuch as the President-Elect is also Chairman of the Program Committee and has the responsibility, along with the other members of the Committee, for the scientific program, it became necessary, after Dr. Turner's passing, for the Council to appoint a Chairman for the Committee. Dr. Oscar O. Miller, one of the Vice-Presidents, was selected and took over the responsibility for the program. The passing of our Secretary necessitated the selection of someone to carry on the work of the Association for the balance of the year, and P. E. Blackerby, who had been assisting Dr. McCormack in these duties for several years, was, by the full vote of the Council, appointed as Acting Secretary and Editor to serve until the next meeting of the House of Delegates.

The members of the Council having been appointed in the previous year as Procurement and Assignment consultants to the state chairman for their respective districts are happy to report that

there has been very little opposition to the efforts of the Procurement and Assignment services in Kentucky to clear, with the National Procurement and Assignment, Kentucky physicians for service with the Armed Forces. Each Councilor, conscious of his responsibility to the profession, has endeavored to investigate the circumstances in any case where there was doubt, and to report them to the state chairman. A joint meeting of the Council and the State Committee for Procurement and Assignment was held during the year, at which time the lists of physicians under forty-five were gone over very carefully in order to advise with the state chairman as to the availability or essentiality of physicians not theretofore commissioned. The response of Kentucky physicians to National Procurement and Assignment has made an enviable record for the state, and the State Association has honored itself before the people in keeping faith with wartime obligations. In July it became known that the Army would need an additional six thousand physicians. Stimulated by editorials in the Journal of the American Medical Association, and the National Procurement and Assignment, efforts were renewed to secure a number of other physicians from our state. During the months of July, August and September, a careful survey of lists of physicians who had been heretofore deferred, became necessary. A number of the deferred physicians responded without hesitation; quite a number of others who had formerly applied for commissions and had been rejected for minor defects reapplied. While the number actually receiving commissions is not large, we again can take to ourselves much satisfaction from the fine spirit evidenced by these.

Since the last meeting of the State Medical Association, the publication of the Woman's Auxiliary Supplement has been discontinued, but a limited space in the Journal, once each quarter, was made available for Auxiliary reports and news items of interest to the wives of our doctors. The Council has given its approval to the discontinuance of the Auxiliary Supplement and the inclusion of certain material in the Journal each quarter. For several years the House of Delegates has appropriated a sum not to exceed $500 as a reserve fund for the Woman's Auxiliary and the publication of its Quarterly Supplement to the Journal. In view of the fact that the Auxiliary Supplement has been discontinued, for the duration at least, and that its reestablishment is not anticipated during the next year, the Council recommends that the maximum amount for this reserve not exceed $200. In consideration of the fact that the American Medical Association and many of the state associations have continued sponsorship and support of the medical auxiliaries, and in recognition of the sustained efforts of the leaders of our own Auxiliary, it is our judgment that continued support and encouragement shall be given to the programs and public relations of our state and local auxiliaries.

The Council would like to reiterate its stand in regard to the enforcement of the Medical Practice Act by quoting as follows from its report made to the House of Delegates at the meeting of the Association in 1942: "For eighteen years this Association has cooperated with the State Board of Health in the enforcement of the Medical Practice Act and other health laws for the protection of our people. During each of these years the House of Delegates has authorized the expenditure of a sum not to exceed $1,200 for this purpose. The Council recommends that this amount be appropriated for the next year. It has not been necessary to use any part of this appropriation for the past several years, but it is important that it be available in case an emergency should arise in which it might be needed. We wish to urge the county societies to bring to the immediate attention of the State Board of Health any practice of medicine by unregistered practitioners. Such information should be accompanied by the names of witnesses upon whom these people have practiced, as this expedites the necessary legal procedure."

The Council would recommend that an appropriation not to exceed $750 instead of $1,200 which has been provided annually for the expenses of the Committee on Public Relations be made for the next year. Of the amount appropriated last year, $360 was expended, which is the same amount as that expended in the previous year.

As has been its custom for a number of years, the Council has ordered the publication in the JOURNAL of the report of the public accountant who has audited the accounts of the Secretary and Treasurer. Members of the House of Delegates and all other members of the Association are

urged to study this report for their information and consideration.

The total income of the Journal this year was $8,615.68 as contrasted with $7,888.58 last year and $8,013.26 the year before. The cost of the Journal was $6,707.23, as compared with $8,509.78 last year and $8,013.15 the year before.

The auditor's report for 1942 showed total assets of $20,578.00; the report for this year shows a total of $22,319.56, an increase of $1,741.56. In studying the membership dues, we find that there was a loss of $1,050.00 in 1943, as compared with the total for 1942. The income of the Journal, on the other hand, shows an increase from its advertising of $729.09, the income in 1942 being $7,888.59, while that for 1943 shows a total of $8,615.68. It is also noted from the auditor's report that there was a saving in the printing costs of the Journal in 1943 over 1942, the cost for 1943 being $6,522.50, as against $7,079.24 in 1942, a saving of $556.74. The sum total of the increase from advertising and the saving effected in the cost of printing is $1,283.83. Thus, when we deduct from this saving the loss in membership dues, we have $233.83 over, as compared with the previous year.

The total paid membership for 1943 is 1,641, as compared with 1,845 in 1942, representing a membership loss of 11 per cent, or a total of 204 members. This is due, to a very great extent, to the absence of so many of our members who are now commissioned in the Armed Forces of the United States. The Acting Secretary submits to the Council the following information to indicate the influence of the loss of members through Service connections on the total membership for the current year, as compared with 1940:

Counties with Cities of First and Second Class

1940	1943
787	702

Percentage net loss 10.8

Counties Other than Those with Cities of First and Second Class

1940	1943
1040	939

Percentage net loss 9.7

From these figures it will be seen that the membership loss is fairly evenly distributed throughout the state. The House of Delegates of the American Medical Association at its last session held in Chicago, June 7 and 8, 1943, voted a reapportionment of state delegates to the American Medical Association, and, as a result, the number of delegates from Kentucky was reduced from three to two. A number of other state associations with memberships approximating that of Kentucky also had corresponding reductions, while, on the other hand, a number of states with much larger Association memberships were only given an increase of one delegate each.

The Council has ordered printed a list of the physicians holding commissions in the Armed Forces. This roster will contain the names in the first publication, but not the ranks; however, the Secretary has been instructed to obtain and prepare for publication at the earliest possible time the up-to-date rank of each of our Kentucky physicians, and the secretaries of county societies are urged to cooperate in order to have the report as correct as possible.

Recognizing the fact that the physicians remaining at home are being overworked and have so little time for attendance upon meetings of their societies, or, in fact, any public meetings, the Council would urge upon all county secretaries the importance of watching their own membership lists and keeping their physicians reminded of the need of maintaining society membership. The Council would remind all of the members of the Association that membership in the state organization is very important. Each member in good standing has the advantage of the Association's defense in suits growing out of charges of malpractice, and understands that he, through this service, is assured of the profession's support for an equitable and fair hearing. Each member is reminded that state licensing boards, in giving consideration for reciprocal licenses, have access, through the American Medical Association, to the facts that emphasize the good professional standing of members in the constituent state and county medical societies. Each member is also reminded by the Council that he adds to the influence of his profession on matters important to the public welfare by maintaining membership in his county and state societies. Each member is further reminded of the motto of Kentucky: "United We Stand, Divided We Fall," and that a united forefront now especially is necessary, as the profession faces in the immediate future the possibilities of legislation by the National Congress that may affect in a very vital sense whether our profession is to have continued freedom of action in

response to freedom of choice on the part of the people for the scientific services our doctors have been trained to give; and, finally, the profession is reminded that when our brother physicians shall have returned from their posts of duty in service to our country, it is important that they find their medical organizations not static, but courageously demonstrating a determination to make its leadership a continuous and effective one in the affairs of our state. To this end, the Council urges that county societies continue with their regular meetings, and where the membership is too small, to hold joint meetings with other county societies, either on a Councilor District basis or on a unit basis consisting of fewer counties. The Council is aware that this is being done in a number of sections of the state and would like to encourage these groups and urge as frequent meetings as possible.

In view of the fact that there will be only two days for scientific meetings of the Association this year, and that these are to be devoted entirely to a postgraduate course conducted by lecturers provided by the Wartime Graduate Medical Meetings under the auspices of the American Medical Association, the American College of Physicians and the American College of Surgeons, the number of scientific papers available for publication in the Journal during the next year is likely to be much more limited. The Council, therefore, urges upon secretaries of the various county and district societies the importance of submitting to the Editor all scientific papers read before their meetings. This is so vital to the continuing success of our Journal that the Council would like for the delegates to emphasize this need in their respective counties.

The Council has had opportunity to review a tentative report made by the Committee on Postgraduate Courses, and in consideration of the need for continuing this activity, particularly during the war period, the Council approves the action of the State Board of Health in making available for such teaching courses the services of Drs. Philip F. Barbour and J. Garland Sherrill, and in order to encourage other members of the profession with known teaching ability to lend their services on behalf of this postgraduate program, the Council would recommend to the House of Delegates an appropriation not to exceed $500 for the actual expenses of any physicians engaged in private practice who may volunteer their services for this postgraduate program.

Out of consideration of his faithful service to our profession and to the people of Kentuucky for nearly half a century, and in recognition of his outstanding reputation as a leader in the fields of organized medicine and public health, the Council recommends to the House of Delegates that one issue of the Journal, sometime during the coming year, be set aside for memorial tribute to our late beloved Secretary, Dr. Arthur Thomas McCormack.

The Council also recommends that the State Board of Health of Kentucky provide for the dedication of the new Annex to its present building as a memorial to Dr. Arthur Thomas McCormack and that the State Medical Association purchase and have hung within the building a memorial plaque corresponding to that which is in the main building of the State Board of Health, dedicated to and in memory of the late Dr. J. N. McCormack.

It was voted by the Council that the President and Secretary of the State Medical Association formally request the Governor of Kentucky to have the new State Tuberculosis Sanatorium addition designated as the Arthur Thomas McCormack Memorial Sanatorium.

The Council again desires to go on record as being grateful for the fine support given it by the members of the organized profession and as giving assurance of continued efforts in furthering the interests and welfare of our physicians in Kentucky, and we bespeak for each member of the State Society his best endeavor toward keeping our professional home fires burning. (Applause.)

T. Atchison Frazer, Marion: I move the adoption of the report.

President Howard: I think the regular procedure is to refer this to a Committee on Report of the Council. John H. Blackburn is Chairman of the Committee on Report of the Council.

We have heard this very comprehensive report, and it shows that these gentlemen have been working, they have been active, which is evidenced by this report.

T. A. Frazer: I move the report be referred to the Committee on Report of the Council.

The motion was seconded and carried.

President Howard: Now we will have the Treasurer's report.

REPORT OF THE TREASURER

A. W. DAVIS, Madisonville: The September Journal gives the entire report of the Treasurer as certified to by the public accountant. The only recommendation that I would have to make with regard to the amount of money we have is that our savings account be invested in war bonds.

C. C. HOWARD, Glasgow: I move that the report of the Treasurer be accepted and we invest the money in bonds.

PRESIDENT HOWARD: Unlike the other report, I think the regular procedure is to refer this to the Committee on Audit.

C. C. HOWARD: I move that it go to the Auditing Committee.

The motion was seconded and carried.

PRESIDENT HOWARD: The report is referred to the Auditing Committee.

Now we will have the report of the Secretary.

REPORT OF THE SECRETARY

SECRETARY BLACKERBY: Mr. President, Members of the House of Delegates, and Officers: The members of the House of Delegates will understand that in submitting the report of the Secretary for the Association's fiscal year, your Acting Sectary has served in this official capacity for a little less than two months. It necessarily follows that, for the most part, the report will have to confine itself to certain facts relating to membership, the publication of the Journal and its contents.

The usual number of Journals was published during the year, one for each month, with an average of sixty pages. It is noted that reading matter totaled 498 pages, as compared with 561 for the previous year, a reduction of 63 pages; the pages of advertising, however, show an increase, 341 in 1943, as against 332 in 1942. There were published 81 original articles and 50 editorials; the original articles were made up of 34 read before the State Society, 25 from Jefferson, 6 from other county societies, 3 from district societies, and 7 from the Eye, Ear, Nose and Throat Section.

In commenting upon the contents of the Journal from the standpoint of scientific papers, I would like to emphasize the need for more contributions from county medical societies other than Jefferson, which is always in position to supply a liberal number. It would seem that nine scientific articles from all the other county societies is a comparatively small number. Because of disturbing conditions in this war period, with so many of our younger members away on Army duty, the likelihood is that still fewer scientific papers for the Journal may be available for the next fiscal year. This was discussed at a recent meeting of the Council, and Councilors were urged to impress upon secretaries of county societies the need for submitting scientific articles for publication. I have no doubt that such stimulation will result in an adequate number. There naturally will be fewer scientific articles for the Journal from the State Society meeting because of the two days' session and the limited number of speakers. Editorials in 1943 totaled 50 as compared with 65 in 1942. I would like to recommend that the House of Delegates authorize the Secretary-Editor of the Journal to appoint a Consultant Committee on editorials and scientific articles, with the understanding that the committee members selected are to be approved by the Council. This committee should prove of very great service in helping the Editor to maintain high standards for the Journal content.

In addition to serving as Secretary to the Standing Committees, your Secretary has attended each meeting of the Council and participated in the discussion of matters engaging its attention.

Your Secretary has also served as Chairman for Procurement and Assignment in Kentucky, and in this capacity has been required to give a great deal of his time. Clearance papers on all physicians applying for commissions have to be signed by the Chairman and copies provided for the office of National Procurement and Assignment and also for the American Medical Association. Other forms of clearance are supplied to Army and Navy Procurement officers having jurisdiction over Kentucky. Procurement and Assignment offices at State Association headquarters maintain a comprehensive file of all physicians in the state. National Procurement and Assignment has recently requested that another survey be made in order to secure more intimate facts on the full status of physicians in Kentucky. This is intended to bring up to date all the information possible in regard to the distribution of doctors, together with the types of professional service they are rendering. It is generally understood that the primary function of Procurement and Assignment is to assist in the selection of doctors for commissions in the Armed Services, but not enough is known of the efforts being made to secure replacement. For years before the war, medical supply

was inadequate in a number of rural sections of the state. Naturally, this condition has become more acute, with so many of our physicians obtaining commissions. In the last year, both petitions and delegations have come to state headquarters seeking physicians for locations in needy sections. It is gratifying to report that since Procurement and Assignment started, more than 100 physicians, most of whom were replacements, have located at various places in the state. It has been much easier to secure replacements in the industrial areas, because, as a rule, much larger incomes are assured. However, some physicians have been obtained for practice in the agricultural sections of the state, but not nearly enough. There are still a number of localities in rural sections where physicians are imperatively needed.

We would like to cite one county as an illustration of what has happened in the last two years. Before the War, there were five physicians in the county, all of whom were active in practice. The youngest applied for and secured a commission; a little later, the next youngest one died, leaving only three physicians. Of these three, one had a serious automobile accident, practically incapacitating him for any practice; another suffered a coronary attack, limiting, to a considerable extent, his activity. This leaves only one physician to carry on as usual, and he is past sixty years of age. Other illustrations, reflecting somewhat similar conditions, might be cited.

We have had an unusually high death rate among physicians in the state during the past year. Deaths totaled 72, 36 of which were members in good standing of the State Medical Association. In connection with this, Mr. President, I have the total roster and I hope that this might be read at the open meeting tomorrow night with whatever immediate memorial attention could be given to it. Most of these were required to extend themselves beyond their physical capacity and should be recorded definitely as war casualties. This being true, it follows that, with the additional burdens they are carrying, our home physicians, though they are not permitted to wear the uniform, are nevertheless sacrificing themselves on the altar of their country. We applaud and justly so, our physicians who are giving themselves unselfishly in service, both at home and in the Armed Forces. Procurement and Assignment Service set up by the Government, under the sponsorship of the American Medical Association, has a heavy responsibility in connection with both Army-Navy and home supply of physicians. The state committee serving with your Chairman, together with the members of the Council of the State Medical Association, has done everything possible to carry out successfully a procurement program giving due regard to both fairness and justice. The State Chairman would be in a very unhappy position without the help and guidance of these two professional groups. Any physician in the state who has either been rejected for Army Service or is over age, and who believes that he could be spared from his own community, could make a worthwhile war contribution by offering his services to Procurement and Assignment for replacement and location to meet an established need.

I am sure that the members of the House of Delegates will recall with a great deal of pride the long and unselfish service rendered the profession by your late Secretary, Dr. McCormack. In his public career, he had many duties to perform, but I am sure that none of them was closer to his heart than those he rendered on behalf of his profession. We know that he loved his work as Secretary of the Association. I count it a privilege to have been given the opportunity to serve as Acting Secretary for the past two months. Although there have been some busy days, they have been enjoyed, because they have afforded me the opportunity to discharge a professional responsibility in an official way. even though for so brief a period.

President Howard: You have heard the report of the Secretary.

Sam C. Smith, Ashland: I move its adoption.

The motion was seconded and carried.

President Howard: We will now have the reports of Councilors by Districts.

Reports of District Councilors

First District

V. A. Stilley, Benton: Despite the fact that there are quite a number of our young men in the Armed Forces, we have gained one in membership in this last year. I think that is very remarkable and it is very gratifying to me to report that we have actually shown a gain instead of a loss.

We haven't had as many single county medical society meetings this year as we

have had heretofore, but we have had several combined county meetings and the Southwest Kentucky Society has been meeting regularly. One county, McCracken, meets regularly all the time. The others are in two and three and four county districts, and they meet regularly. The organization as a whole in West Kentucky I think has done splendid work this last year.

We had our gain in membership from the fact that a good many men who had practically retired from the practice of medicine, that is the older men, joined up when the young men went into the service. It is one of the most remarkable things to me how you can rejuvenate an old fellow and get him back into harness. They have gone to work and are doing a good job and are trying to carry on just as though they were in the Armed Forces. I am very glad to make the report that we have a net gain of one in our district.

Second District

E. L. Gates, Greenville: I have been a member of the Council only a very short time and have not had an opportunity to go over the district, but I expect to in the next few months and meet the men and see what they are doing.

Third District

C. C. Howard, Glasgow: Our district has suffered quite a little. We have lost Dr. C. C. Turner and Dr. Arthur McCormack, and their loss we feel very keenly, I do especially, because they both loved me with all my faults, which is quite a compliment.

We have furnished our part of the doctors for the Army and Navy, and the others are carrying on and we are trying to have enough meetings to keep organized, and we will continue to do so.

Fourth District

J. I. Greenwell, New Haven: The Fourth District is just about the same as last year.

Fifth District

President Howard: J. B. Lukins, Councilor, is sick, and Dr. Pritchett will read his report.

James H. Pritchett, Louisville: This is a rather short report that Dr. Lukins has given us, but you know as well as I do the tremendous amount of work he has done in this District. He is one of those modest, unassuming fellows who stay in the background most of the time. His most recent innovation has been to send out to all members of the District, with the exception of Louisville or Jefferson County, a small booklet which many of you have received, entitled "Rheumatic Fever in Children," very comprehensive, and approved by the Committees on Cardiology and Pediatrics and by the Public Health Service. This book is, I think, one of the best I have ever seen. That is the type of man you have representing the Fifth District.

The report reads as follows: In the Fifth District this year, there has been very little organization activity. We have active county societies in Shelby, Henry, Franklin, and Jefferson Counties. Two hundred and twenty-four of our doctors are in the military service.

Every member has received a pamphlet giving the most up-to-date information and the opinion of experts on rheumatic fever. This is one of the unsolved problems of our profession, and the information in this pamphlet should be very helpful.

All of our doctors are loyal to the profession and the country, and they are making a valiant effort, in view of the scarcity of doctors, to give adequate medical care to all the people in our district.

I move the adoption of Dr. Lukins' report.

The motion was seconded and carried.

Sixth District

W. B. Atkinson, Campbellsville: The activities of this district have been necessarily curtailed by the war. A few county meetings have been held, but no district activities were considered advisable.

Seven of the eight counties have contributed one or more physicians to the medical divisions of the armed forces. The one exception is Adair County, which has had an insufficient number of physicians for several years. Green County is also in need of more physicians due largely to the death of one physician and the ill health of two others. The other counties of the district, while not having their full complement of doctors, are not in dire need of any adjustments at this time.

Eighth District

J. M. Blades, Butler: Due to the increased work put upon us from this war, it has been impossible for me to make many visits to the various county meetings in the Eighth District.

The eleven counties comprising this District have a paid membership of 141, as follows:

County	Mem.	N-Mem.	In Ser.
Campbell-Kenton	84	18	51
Bracken-Pendleton	12	1	2
Mason	8	6	5
Harrison	9	2	4
Grant	7	0	4
Fleming	8	2	3
Boone	5	2	2
Nicholas	6	2	0
Robertson	2	0	0

Therefore, we have 141 members, 33 non-members, and 71 in service.

Campbell-Kenton, Bracken-Pendleton, Harrison, Grant, Fleming and Mason hold regular meetings. Boone, Nicholas and Robertson have none. These meetings have had an average attendance, considering the heavy burden imposed by war conditions.

Our Licking Valley District meetings were disrupted last year, but we are pleased to say have been revived. We had two good meetings, in June at Falmouth and in September at Brooksville. We had some excellent papers by local and visiting essayists. Dr. Swinford, of Cynthiana, President of the Harrison County Medical Society, has given our district a great treat three times the past year with a wonderful banquet each time with all the trimmings and a good time for all, the average attendance being about 60.

The Campbell-Kenton Society is host to the Southern Medical Association which will meet in Cincinnati in November. This will be a great convenience for the members of our Association.

The members of the Eighth District have been put to a test in taking care of its people; they have done a good job and no one has gone forsaken.

PRESIDENT HOWARD: I think it is very significant, and I appreciate the fact that Dr. Blades brought out the number of members in each county, and the number of non-members. That is about the first report we have had along that line, it calls our attention to the fact that there are doctors in the State of Kentucky who do not belong to our State Association or to the county societies. You know a majority of the doctors belong and pay their dues regularly, and expect to do so, but I think where we need to work is on the doctors who are the non-members. I think we should make an effort to get every eligible doctor in the State of Kentucky. Remember that slogan we have: "We want a league, offensive and defensive, with every well-wisher of Kentucky and her people." We ought to start with the doctors and try to have them as near 100 per cent as possible.

NINTH DISTRICT

PROCTER SPARKS, Ashland: The Ninth Councilor District comprises eleven counties, namely: Boyd, Carter, Elliott, Floyd, Greenup, Johnson, Lawrence, Lewis, Magoffin, Martin, and Pike, members varying from one to 27. Boyd County has 27 members and two non-members. Carter County has seven members and three non-members. Floyd County has 16 members and 11 non-members. Greenup County has seven members with no non-members. Johnson County has 11 members and five non-members. Lawrence County has six members and two non-members. Lewis County has four members with no non-members. Magoffin County has two members and two non-members. Martin county has one member and no non-members. Pike County has 18 members and nine non-members. Elliott County has two non-members.

Some of the non-members mentioned are now in the service. My record shows that a total of 34 doctors from the Ninth District are now in the service.

I attempted to have a meeting in my District this year but circumstances prevented. I feel sure that each active doctor in my District that is not in service is very tired of this terrible war, and each one is trying to do something about it.

PRESIDENT HOWARD: That is another significant report, showing that in some counties 50 per cent of the doctors are not members. It is a challenge to us all.

TENTH DISTRICT

C. A. VANCE, Lexington: The County Society Register of the Tenth District is as follows:

County	Membership
Bath	5
Bourbon	12
Breathitt	3
Clark	11
Estill	5
Fayette	121
Jessamine	9
Lee	3
Madison	30
Menifee	3
Montgomery	5
Morgan	3
Owsley	3

Powell	3
Rowan	3
Scott	12
Wolfe	4
Woodford	8
Total	243

The Tenth District has 243 paid up members this year. Last year we had 270, and in 1941 we had 268; 270 paid-up members in 1942 was the largest membership we have ever had in the District. There is a decrease of 28 members this year from last, and this is explained by the fact that a great many men are in the service and some of them have not paid their dues to their county societies. Some of the county societies have paid the state dues for their members who have entered military service. I think this is a very fine thing to do and all of them are to be congratulated.

There are 19 non-members. Some of these have retired on account of age and illness; some have moved away from the state or have gone into the Army, and some are practicing as interns in hospitals in Lexington and some are in the U. S. Veterans Administration Facility or the U. S. Public Health Service Hospital in Fayette County, and a few are not eligible for membership.

The county societies of Bath, Breathitt, Bourbon, Estill, Lee, Menifee, Owsley, Scott and Wolfe have all their physicians in their counties as members of their county societies.

The county societies of Bath, Breathitt, Jessamine, Lee, Menifee, Morgan, Montgomery, Owsley, Rowan, Powell and Wolfe Counties hold occasional meetings.

The county societies of Bourbon, Clark, Fayette, Madison and Woodford Counties held regular meetings this year; these have been well attended and their programs were instructive.

The Tenth District has suffered by death the loss of the following physicians since the last meeting of the Association:

F. H. Clarke, Lexington, C. A. Nevitt, Lexington, U. G. Holloway, Versailles, J. F. Reynolds, Mt. Sterling.

The District lost five members by death in 1942 and 12 members in 1941. Two of these physicians who died the past year were retired members of their county societies. The others were active in their county societies, and all were highly respected by their associates in practice and by their communities, and all of them will be greatly missed.

From the list I have, 92 physicians have gone into the service from the Tenth District and about 41 members who are under the age of 45 are still practicing. Some of these have applied for service and have been disqualified on account of physical disability and some have been declared essential to their community for a limited time by the Procurement and Assignment Committee. As far as I can tell, most of the people in the Tenth District seem to have adequate medical service, and in several localities, such as Menifee County, they are receiving better medical care than they have had for a good many years.

The Tenth District did not hold a summer meeting this year. We usually have large and enthusiastic meetings, but have not had any District meeting for two years. Perhaps we can have one next summer.

In all of my reports to you as Councilor of the Tenth District, and this is my eighteenth, I have spoken much of the importance of the county society. The Kentucky State Medical Association could not exist without active county societies, so let me again urge you to keep up your county society as the most important unit of organized medicine.

JOHN W. SCOTT, Lexington: If it is in order I would like to call attention to this fact in Dr. Vance's report. The President referred to the number of non-members as being important in estimating the activities of the Society. We must remember that in a county like Fayette, there are ten or a dozen colored physicians who are listed as physicians but who under our procedure are not eligible. I think we must remember that when we consider the number of non-members.

PRESIDENT HOWARD: Yes, sir, and the interns and the doctors at the hospitals. I think, the showing Dr. Vance made of 243 members and only 19 non-members in a District with that many counties and that large a population and that many doctors is a good report.

C. A. VANCE: The Fayette County Society paid the dues of all the men who are in service in Fayette County; that is why we have got that many. That is 121.

PRESIDENT HOWARD: You are to be congratulated for that. Dr. Scott, I think your point is well taken.

H. K. Buttermore, Councilor for the Eleventh District, could not be here. Dr.

Blackerby, the Secretary will read his report.

ELEVENTH DISTRICT

SECRETARY BLACKERBY: The Eleventh District is made up of counties of Southeastern Kentucky and classified by our national government as industrial counties, due to the mining of coal and cutting and sawing of timber, which are both essential and very important to the defense industry.

During the past two years, our District has furnished our quota of doctors for the Army and Navy. Wherever it is possible to relieve a younger doctor and replace him with an older one who is physically disqualified, we have done so. We have very few doctors in our District left at the present time who are not essential to the public welfare and the best interests of national defense.

During the past year, every county in this District has made every effort to hold regular county meetings, and I am glad to state that the county secretaries have advised me they have been able to have, in some meetings, other members from other parts of the state as guest speakers on their program, and at most of their meetings, general discussions of local conditions have helped to make these meetings more successful and interesting.

A three-day postgraduate course was given at Corbin, Kentucky, by Drs. Barbour, Sherrill, Turner, and others. This meeting was largely attended by doctors from Laurel, Knox, Bell, Whitley, and Harlan Counties. The doctors are looking forward to other meetings during the coming year.

PRESIDENT HOWARD: That concludes the reports of the members of the Council.

Now we will have the reports of the Delegates by Counties.

REPORT OF DELEGATES

CALLOWAY COUNTY

J. A. OUTLAND, Murray: Calloway County has nine active men in practice, one retired, and a health officer, and has four men in the service. The retired man, the health officer and the nine practicing men are all paid up and one in the service is paid up. We have two doctors in Europe, one in Italy and one in Africa, and one in Australia and one in the States. There are really thirteen paid up, but the county has not paid the fees of the members in the service, so there are several in the service called before 1943 who have not paid this year, but the county is 100 per cent, because we have two members not in the county now who are paid.

CARLISLE COUNTY

J. F. HARRELL, Bardwell: We have but four doctors in our county and they all belong to the society.

CLINTON COUNTY

E. A. BARNES, Albany: There are four regular and one part time practicing physicians in our county, all are members of the society. Two physicians have gone into the Army.

We have had no regular meetings, but our doctors attend the staff meetings of the Community Hospital, Glasgow.

CRITTENDEN COUNTY

T. A. FRAZER, Marion: Crittenden County has two good, young, active physicians, two recaps, and two not worth recapping. Our doctors who are practicing are all members of the society and we have one retired physician who is a member of the society. On paper we have six physicians; we actually have five who are practicing. We have no regular meetings of the society. Most of us belong to a Four-County Society, Crittenden, Lyon, Caldwell, and Trigg, and we have four meetings each year. We have splendid programs. The last program was at Dawson Springs in August, one of the best programs I have ever heard, put on by a dentist and a tuberculosis specialist from Camp Breckenridge, and I am free to say that the discussion of tuberculosis was the most enlightening discussion of this disease I have ever heard, and I have heard many. The dentist was very fine. His subject was, "A Dentist Joins the Army," and he was full of pep and full of knowledge and gave us a splendid paper. We meet four times a year in the four-county society and we alternate those meetings by counties.

We want to establish a hospital, a nonprofit corporation, and enough money has been given to us to establish it and equip it. As soon as we can get the priorities so we can get the things, we will go ahead and we will be in operation in a short time. It will be about a 20-bed hospital, absolutely paid for, with the money in the treasury to help tide us over for the year.

FULTON COUNTY

JOHN G. SAMUELS, Hickman: We have seven active physicians and six in the Armed Services, a local health officer, and one physician deceased.

GRAVES COUNTY

H. H. HUNT, Mayfield: Graves County

has eighteen active physicians, all in good standing, five in the service, an active health department, all doing well, no deaths, no hits, no errors.

MARSHALL COUNTY

S. L. HENSON, Benton: The Marshall County Medical Society has not met every month, as our physicians have been very busy and did not think it possible to give the time. The society has met every two or three months, with some scientific program, and in order that any problem might be discussed.

Mr. R. Van Roberts, who is our venereal disease educator, was with us at one meeting and showed his pictures intended for the profession and for the laity. The society endorsed them as being very educational, both to the profession and the laity.

Only one physician failed to pay state and county dues.

The Auxiliary has met each time and has given the society the best of cooperation as well as encouragement.

MCCRACKEN COUNTY

FRANK BOYD, Paducah: McCracken County has had no deaths this year. We have 43 members, all in good standing. There are four in the Army. We have monthly meeting except during the months of July and August. We also have biennial meetings of the Southwestern Kentucky Medical Association, which is usually very well attended. That has been going on for many years. I believe everything is going along all right down there.

Mr. President, our local society asked to have a resolution presented. I will not read it, but give it to the Secretary, to be referred to the Resolutions Committee.

DAVIESS COUNTY

W. L. TYLER, Owensboro: We have monthly meetings of the Daviess County Medical Society that are pretty well attended. All of the active members of the profession that are not in the service, with the exception of two, are members of the Daviess County Medical Society. I think we have seven or eight of the younger men who are now in the service. I think some good has come to some of the young men about my age down there who thought they had rheumatism and other things that prevented their leading active lives. My son was practicing medicine with me, and since he left and the responsibilities of both of us fell on me, my back's a whole lot better.

During the year, we lost one active member by death. Most of the other men down there are past middle age, and I think they spend most of their time thanking God that they are able to get up and do what they are called upon to do instead of raising the devil about what they don't get.

HENDERSON COUNTY

E. W. SIGLER: We have nineteen members, of whom two are in the service. All are in good standing except one. We have tried to hold regular meetings throughout the year. We have had two especially good meetings, and we were fortunate to have Dr. Wiles and Dr. Lutz on gonorrhea. At each one of these meetings we invited the surrounding counties and had very good attendance. The members of our society attend the meetings at Camp Breckenridge. We also attend the meetings at Vanderburg County, which are some of the best meetings held in Indiana.

UNION COUNTY

BRUCE UNDERWOOD, Morganfield: Union County has eight paid-up members and one honorary member. In addition to that, paid up members to the local society include four dentists and one registered pharmacist and three funeral directors. We picked up the practice of the four-county medical society of which Dr. Frazer is a member, and have been inviting the dentists to attend the society meetings, and we continue to feel that dentists are physicians and consider them as specializing in dentistry.

We have held the meeting each month the first Tuesday night. Each meeting has been a dinner meeting.

Since the county society is so small that it is hard to support an Auxiliary we dedicate one of the meetings each year to ladies' night. Last year, for the third consecutive time we held a district meeting in which members of all of the allied professions that I mentioned were invited and we had about 500 attend.

We had a real drawing card last year for the first time. Camp Breckenridge was just opened, and through the courtesy of Colonel H. D. Jackson, Post Surgeon, we enjoyed the inspection of the medical facilities of the camp, and were given a nice dinner and a very interesting scientific session afterward. Some 500 attended that meeting.

The last feature of this report is that each one of our meetings had an outside program. I mean by that that we either had a doctor who didn't live in the county come in to give us a paper, or we had a

16-millimeter motion picture of scientific interest.

We have lost two physicians by death, J. A. Watkins of Uniontown and I. D. Winston of Sturgis. There have been no other changes in the personnel and membership of Union County.

Webster County

Frank Melton: I am pinch hitting for the alternate down there. We haven't had any actual meetings this year, but we have attended Union County and Henderson County meetings. There are about eleven men practicing there, one colored. Several of the older men have come back in practice, and the activity of those men makes me feel that I am a real youngster.

Allen County

A. O. Miller, Scottsville: Allen County has had a tragedy. In the last two years we have lost five doctors, leaving three, with about 18,000 people to take care of. We are doing our bit. All the members are in good standing and have paid their dues.

Christian County

Gant Gaither, Hopkinsville: Christian County has a good report to give in most respects. We have no non-members in the county. The county adopted the policy that Dr. Vance spoke of, and paid the dues for all of the men who are in the Armed Forces, so that we stand shoulder to shoulder with you, and I think it is the correct thing for those who can do so.

We have regular meetings each month, and an excellent attendance.

We have been caught between the jaws of the Army, so to speak, in that we lost a great many of our younger men but made it up in the fact that Camp Campbell is located partly in Christian County and we have been able to draw from Camp Campbell's personnel for many of our programs and for a great deal of our attendance, so that we do have well attended, excellent meetings, and the county society continues to thrive, and it is always a pleasure to attend the meetings.

May I add that we also lost one of the most distinguished men in Kentucky during the year, Dr. Frank Stites, the father of three sons who live in Louisville, and my uncle. He had been in practice for probably forty years there, perhaps more, and his loss is a very definite hindrance to carrying on there.

In addition to that, two years ago the loss of Austin Bell means that two of our top ranking medical men have been taken.

Cumberland County

W. Fayette Owsley, Burkesville: I might put some ditto marks on for Cumberland County. It has been about the same thing for a number of years. It reminds me of a fellow who is too lazy to say his prayers, and just has them printed and pasted up on the head of his bed. The report for the last number of years from Cumberland County has been about the same. We have got four members there, all paid up, and as far as I know in good standing.

Logan County

E. M. Thompson, Russellville: Logan County Medical Society has a better report than usual to make this year. In the past we have held one meeting a year, at which time we had election of officers to hold office for that year, and usually invited an outside speaker. This year, at our meeting in May, we had Dr. Chenoweth to discuss this emergency maternal and child welfare program. At that meeting the society voted to hold a meeting every month, and the members were to rotate in entertaining the other members and taking charge of the program, so since May we have had monthly meetings.

We have thirteen members. We have three other doctors in the county who are not members of the society, one of whom has retired from the practice of medicine, one of whom is colored, and that leaves only one other in active practice who is not a paid-up member. We have lost three physicians to the Armed Forces.

Metcalfe County

H. T. Carter: Metcalfe has five physicians ranging in age from 39 to 83, and really there is only one active physician in practice in that county. All the members are paid up. We have no non-members, and we meet twice a year.

Todd County

B. E. Boone: We have four members and one non-member. All of our men practically are past fifty and we have one man under fifty years old. We don't have regular meetings. Our society had been called upon to furnish men for the Army, but so far we have had the use of our home men.

Warren-Edmonson

J. B. Helm, Smiths Grove: Warren County has had four meetings this past year, well attended for the number of men left. Our people have been served well and had adequate medical care. We are trying to carry on.

Bullitt County

George B. Hill, Mt. Washington: We had five doctors in the county. Four of them are members, one non-member, and another old man who hasn't practiced for many years. We lost our President, Dr. Ridgeway, and that left us with three men in the county, one non-member, and the two other men besides myself are past fifty. One of those is now in the hospital. We haven't had any meetings, because you might say wherever I am the county society is.

Hardin County

J. M. English, Elizabethtown: We have 14 paid members in our county. We have two delinquents, but they happen to be in the Armed Services. We have four in the Armed Services, and we have been able to have a meeting each month. We have had a meeting every month this year.

On the second Thursday in August, April and December we met with another county society.

We have an organized health unit that is functioning successfully.

We have a peculiar situation in our county. Only fifteen miles from the county seat, we have a fort and that has raised our county seat population from about 3,100 to about 10,000.

The doctors in Elizabethtown are six, ranging all the way from 44 to 80. We are getting along successfully in our work. There is only one really young man in the county. If we get a good night's rest we are fortunate. I am doing more work than I ever did, and I don't like it, but I do it anyway. I think they can't draw on us any more in Hardin County for the Armed Forces because there is nobody to draw from. We have one young fellow thirty-three at Sonora who has a territory thirty miles square. If we all keep our health we will be able to do the work.

Carroll County

J. Sam Brown, Ghent: We have seven paid-up members, no non-members. We have only three active doctors, one chiropractor and one osteopath. We have lost none by death, and none have entered the service. Neither have the three adjoining counties. So the situation remains about the same. We have a health unit which serves three counties and is doing splendid service.

Franklin County

Edward K. Martin, Frankfort: Franklin County has an active membership of sixteen. We have four physicians in the Armed Services. We meet once a month at luncheon and have a program conducted by one of the local members.

Henry County

Maurice Bell, Eminence: Henry County Society was organized about forty years ago and the going has not always been the best during that time. Some years we have not been able to meet, but a few would meet and reorganize, and we held on to try to keep the society alive, which we have been able to do; at present we have thirteen active members whose ages average sixty-six years. If we were to eliminate the younger member I think the other twelve would average about seventy.

We meet on the second Thursday in each month, and we have a dinner at each meeting, and also we invite our wives, which we feel adds to the entertainment and makes it more interesting to us all. One member usually gives the dinner and furnishes the program and we have had very interesting programs. Most often we have a speaker from the city here, which has been very helpful to us general practitioners.

The county cooperates with all medical problems and the society is ready to render any service to the health officer, if possible, and ready to answer calls of people who are not able to pay for any service. We have at all times been cooperative. We have no unethical practice. We are ready to go to each other's service, besides being friendly, and the society at present is in better shape than usual.

We have lost two members to the service, younger members, of course; we have paid their dues. The dentists in our county are also members of our society, and we feel that in many cases the dentist's interests and the doctor's are very close. At present we have a better attendance. We have a hundred per cent membership and often 100 per cent in attendance.

Our society regrets very much the loss of our friend and Secretary, A. T. McCormack, whose service has been untold in every way as far as medicine and public health in general are concerned.

Jefferson County

James S. Lutz, Louisville: The Jefferson County Medical Society has had ten regular meetings and three dinner meetings since January 1, 1943. One meeting was held at the Central State Hospital on June 21, with a buffet supper at 7:00 p. m.

Sister Kenny was a guest speaker before the society at a dinner on March 22. More than 200 members and guests were present on this occasion.

The average attendance at society meetings has been 74: high 215, low 24.

Membership:

Total number of active members	305
Associate members	44
Out-of-state members	7
Members in service	148
New members elected during 1943	28
Members reinstated	4

I am sorry they do not show in this report how many colored physicians they have in the city. I think it is fifty. We have a big colored population here, and they have three or four mighty good colored doctors here, and I think we should give them some consideration.

The society has suffered the loss of ten members by death, since January 1st of this year:

F. C. Askenstedt, June 16, 1943.
C. B. Crittenden, January 15, 1943.
W. O. Green, January 23, 1943.
Henry C. Hartman, May 6, 1943.
Della Hertzsch, July 12, 1943.
J. Henry Heuser, July 1, 1943.
David E. Jones, July 10, 1943.
D. Y. Keith, July 12, 1943.
Arthur T. McCormack, August 7, 1943.
Ben F. Underwood, June 7, 1943.

Owen County

K. S. McBee, Owenton: Owen County has only four members of the society, one non-member. We have not lost any to the service. We have lost one by death. We do not have many meetings since we are few in number and rather isolated.

Boyle County

W. O. Hopper, Perryville: Boyle County has eleven members, four of whom are in the service. We pay our dues. We have regular monthly meetings except for the fact that we suspend meetings during the months of July and August. This fall we have been meeting with the staff of Darnall Hospital, which is only four miles from Danville, and we have met regularly with them since we suspended in July. I may say that it is a wonderful advantage to have a hospital there because the staff meetings are well represented. They have a very able staff. Of course, as you know, most of them are either neurologists or psychiatrists. They also have a surgical department, internal medicine, pathology, and those staff meetings are really well attended.

Taylor County

C. V. Hiestand, Campbellsville: Taylor County has seven paid-up members, one non-member who once was a member but he hasn't been solicited, I reckon. We have three in the service, and I am sorry to say that the county the Secretary referred to a while ago happens to be one of our closest neighbors. Taylor County could look after its own practice pretty well, but unfortunately there is a dearth of doctors in Green, Adair and Marion, and there are five counties around us that we have to help out. Some of these calls are thirty miles. Part of the terrain is pretty rough. Taking it all in all, I reckon they are getting about as good attention as we are capable of giving them.

We have pretty regular meetings. We have an acquisition in our county that is going to help us some. We have a doctor at Moundsville now, where we had none until recently. No doubt he is going to help unburden us. He is not a member yet because he just recently moved in.

Pulaski County

Carl Norfleet, Somerset: I am pinch-hitting for Dr. Robert G. Richardson. The Pulaski County Medical Society has had six meetings this year. Some arranged programs have been held, but others have only had impromptu talks and case reports. This has been due to the increased amount of work done by the few doctors left in the county. However, all have been enjoyed. There are ten doctors from this county in the Armed Services: Major Morris Holtzclaw; Captain Arthur L. Cooper; Lt. Com. Samuel Paris; Lt. Com. J. S. Newman; 1st Lt. L. H. Wahle; 1st Lt. M. C. Spradlin; 1st Lt. Richard Weddle; 1st Lt. Noel C. Hall; 1st Lt. Morton Cundiff; 1st Lt. Robert Jasper.

We have felt the loss of T. M. Garner from our ranks. He was a very hard worker and took pride in his obstetrical work. For several years he was at or near the top in number of babies delivered in Kentucky.

One of the most important meetings that we held this year was devoted solely to the establishment by unanimous agreement of a regular schedule of fees for the medical and obstetrical practice. This has been needed for a long, long time.

We have eighteen physicians in Pulaski County at present; eleven are active, four non-members, two retired or incapacitated, one colored. Of the list the Secretary referred to as being in the Armed Serv-

ices, Pulaski has contributed six men from active practice to the Armed Forces. The other men mentioned were Pulaski County boys born in Pulaski County who had served their internship and were commissioned afterward. The Secretary reports these men of uncertain status as majors, captains, lieutenants and lieutenant commanders. To my personal knowledge most of these men have been advanced from 1st Lieutenant to higher ranks.

Campbell-Kenton County

H. C. White, Covington: Campbell-Kenton County is listed as one of the liberal counties, so we have all kinds of doctors up there. We have chiropractors, osteopaths and regular doctors; we have white doctors, brown doctors and black doctors. We have, however, regular meetings. rather well attended. All of our scheduled meetings have been held, and one extra one.

We are host this year to the Southern Medical Association, and all together I think we are a rather active society.

Grant County

R. E. Kinsey, Williamstown: Grant County continues with a hundred per cent membership, and has, as far back as I can remember. We have lost one member by death in the last year, and one has moved to an adjoining county. Four are in the Armed Services. The six who remain continue to hold regular monthly meetings, doing their best to carry on until the ones who are away can come back to us.

Harrison County

J. P. Wyles, Cynthiana: Harrison County has eight active men. We have had nine meetings. We missed July and August and one other month. We have had two dinner meetings. Our meetings are attended by our surrounding county physicians. The county has had an active medical society for over forty years, long before I was a member. We have three in the service and one retired, an incapacitated member, and we lost one retired, incapacitated member by death this year. We are trying to carry on. We have, as I said, eight regular members. Only one is under fifty. We are still going on and expect to keep going on for the duration.

Boyd County

Sam C. Smith, Ashland: We have 28 paid-up members, 11 of whom are in the Armed Services. The county society paid membership dues on all of the men who went into the service. We have three non-members, one of whom was recently convicted for criminal abortion and was paroled after serving a certain length of time, and I understand now is back in practice. One of the others has not been invited to join for many years, for some reason or other, I don't know what happened before I came there; and the other is a man nearly eighty years old who doesn't choose to join.

We have had ten regular dinner meetings and three called meetings during the year.

Two of our doctors moved away and we had one death.

We meet regularly once a month with the exception of June, July and August, and we have dinner meetings and the attendance is usually good, and we have good programs.

We have two associate members from Greenup County in our society.

Carter County

Smithfield Keffer, Grayson: Carter County has nine doctors, but the only young men except one are in the Armed Services. The rest of us are fifty to seventy-six years old. If we had only Carter County to deal with we think we could get along, but Elliott has no doctors, Lawrence has a few, Boyd has some but they don't even get over their own territory, Greenup has two or three and we have to go down to Greenup and occasionally we get over toward Rowan. I have never had a call in Rowan, but in one week's time I have been in the other four counties, so we think, considering our age and disabilities and ignorance, we are doing pretty well.

Greenup County

C. B. Johnson, Russell: We have seven paid-up members, one in the Armed Forces. The society paid his membership. We have one boy who has never practiced, a graduate from Greenup County now in the Armed Forces. He is not a member of our society because he went directly from his internship into the service.

We have two non-members, one an old man who has retired from practice and doesn't choose to be a member, and another who is not allowed to be a member.

We have rather a long county. It is about fifteen miles wide and thirty some miles the other way, reaching from Boyd down to Lewis. The age of one of the doctors in the lower end of the county is 74 and the other I think 77. The man 77 does no work, practically, at all; he may do a

little office work; but the other man is very active and does a tremendous amount of work. Before the speed was cut down, he would drive sixty or seventy miles an hour, and he turned over three or four times. We were all scared to death he would kill himself, and if something should happen to him I don't know what would happen to us in that part of the county. He does a tremendous amount of obstetrics, perhaps 130 to 150 a year, and other work in proportion. He can be counted on as a man about twenty-five years old. We have another man 75 who has practically retired, and one 62 who is very active; he has an organic heart condition, but still does a great deal of work. We have two men in the county under forty-five. One has been declared essential, and the other has been rejected for the Armed Services. As a whole, with the help of Carter County on one side, we get along well in our county.

We have no regular meetings. In the upper end of the county we attend the Boyd County Medical Society; in the lower end of the county they go over to Portsmouth, Ohio. We asked them the privilege of attending their society, which is just across the river, and so we attend regular meetings.

PRESIDENT HOWARD: Is it the pleasure of the House of Delegates to continue this or to adjourn until two o'clock? What is your pleasure?

A motion was regularly made, seconded and carried, that the meeting adjourn until 2:00 p. m., and at 12:50 p. m. a recess was taken.

SECOND SESSION

Monday Afternoon, October 4, 1943

The meeting reconvened at 2:00 p. m., President Howard presiding.

PRESIDENT HOWARD: We will continue with the reports of county delegates.

BOURBON COUNTY

J. A. ORR, Paris: Such a good report has been made already that if I say anything more I will mess it up. We have a dinner meeting at which we entertain our guests. We usually have an invited guest from out of town. We give him something to eat, but we don't give him any crowd.

FAYETTE COUNTY

J. FARRA VAN METER, Lexington: I am reporting for Dr. Ernest Bradley, who is ill.

Fayette County has 121 members. We have 38 men in the service. The active membership of these men is kept up by the society. We have nine of our members who are U. S. Government employees in federal hospitals in Fayette County. We meet regularly once a month. In addition to this we have monthly CPC and staff meetings at each of our two general hospitals.

I believe there have been no deaths among our active membership this past year.

MADISON COUNTY

ROBERT SORY, Richmond: Madison County Medical Society held nine meetings during the year. The society has 31 active members and one inactive member. There are thirteen commissioned officers from this county, eleven of whom are in active military service. The recent loss of Dr. Hugh Mahaffey to the United States Army, Dr. Wilson Dodd to the Near East Foundation, Dr. J. D. Farris to Emory University, Atlanta, Dr. Robert Rice to graduate study, and the illness of Dr. Max E. Blue has greatly increased the work of the remaining physicians. Also, the addition of a large population with the coming of the Blue Grass Ordnance Depot has added to the load of medical care.

MENIFEE COUNTY

RICHARD F. ADLER, Frenchburg: Our membership has increased from three to four. We have no regular meetings.

MONTGOMERY COUNTY

A. H. BUSH: We have five members and one doctor who isn't a member, but we have all the regular men. We have three men in the service. We have not had regular meetings for the past few years. We have only called meetings for anything that comes up.

HARLAN COUNTY

CLARK BAILEY, Harlan: Harlan County Medical Society has regular meetings except in June and July. We have an active membership of 44. We have more than 12 men in the active service of the United States Army.

I have been instructed by our county society to call the attention of the House to the fact that we are one of the few states in the United States that do not carry our men in service on our rolls, and to ask the House of Delegates to do something about it. If I understand correctly, that report will be made by the Medical Economics Committee this afternoon.

We have a good feeling of fellowship, and everything is very healthy as far as our medical profession is concerned.

Letcher County

E. K. Munn, Jenkins: Letcher County Medical Society meets monthly in Whitesburg. It has 17 paid-up members; 12 attend meetings regularly; five have a spotty attendance record. Two active members rotate in giving well worthwhile scientific programs each month. Fifteen physicians are doing contract practice; two physicians are doing private practice; seven physicians are in the Armed Forces, one being a prisoner of war in Japan. There have been no deaths among our physicians in the county in the past year.

We have an active county health department, run most capably by Dow Collins, who is president of our society. In addition, we have a monthly staff meeting at the Jenkins Hospital, which is well attended.

Perry County

A. W. Adkins, Hazard: We have 33 paid-up members, 4 in the Armed Forces; 10 associate members, dentists and druggists, and one of them in the Army. Thirteen Perry County physicians are in the Army or Navy and one associate member in the Army.

Programs for the year include papers by local physicians, out-of-town speakers, movie films on different phases of medicine, and one dinner meeting each year, to which the ladies are invited. Out-of-town speakers included Drs. E. S. Maxwell, Lexington; Francis Massie, Lexington; and Alice Chenoweth, Louisville, and a guest, Dr. Donnelly.

The average attendance at the meetings is about seventeen.

Muhlenberg County

G. L. Simpson, Greenville: There are eleven active physicians in the county, five in the Armed Forces. Four physicians are over 70 years of age, five between 60 and 70, two under 60, serving 38,000 people, 4,000 miners included.

President Howard: We will next have the report of the Delegates to the A.M.A.

Report of the Delegates to the A. M. A.

Virgil Simpson, Louisville: The annual meeting of the House of Delegates of the American Medical Association was unusual in that no Scientific Session was held on account of conditions of travel and accommodations incident to the war.

The proceedings of the House of Delegates have been printed in the Journal of the A.M.A., but all of the members of the House of Delegates of the Kentucky State Medical Association have, in all likelihood, not read them, and it is pertinent at this point to state why. The Secretary of the A.M.A. reported a total of 2717 physicians in Kentucky in 1943; 1886 of these are members of the A.M.A., but only 1212 received the Journal of the A.M.A., hence, 674 members of the State Association do not read the Journal. Some of that group may be members of this House of Delegates; therefore, a report from the Delegates from the State to the A.M.A. would seem in order.

Distinguished Service Award: The first business transacted by the House of Delegates was the selection of Dr. Elliott P. Joslin, Boston, Massachusetts, to receive the Distinguished Service Award given annually to some American physician for outstanding contribution to medicine.

Legislative Bureau of A.M.A. in Washington: Establishment by the A.M.A. of some sort of agency in the national capital for the purpose of keeping informed as to legislation as well as serving as an easily available source of supply of information to officials and Congress relative to medical matters has frequently occupied the attention of the A.M.A.

A number of resolutions were introduced in the House of Delegates this year with more than usual insistence. Out of the consideration came, finally, adoption of a resolution to create a Council of Legal Medicine and Legislation and the transfer of the present Bureau of Legal Medicine and Legislation to be made a part of the Council.

Another resolution, while not dealing with legislation, but does affect the public interest, was adopted which provides for the establishment of a Council on Medical Service and Public Relations. This Council is authorized to utilize the facilities of the Bureau of Medical Economics and the Department of Public Relations in headquarters office.

Suit of U. S. Against the A.M.A.: The Board of Trustees reported a check for $2,500 assessed as fine and confirmed by the Supreme Court had been paid. This ends the suit filed by the Federal Government against the A.M.A. and the District of Columbia Medical Society charging conspiracy in restraint of trade and which was defended through the District Court, Court of Appeals and the Supreme Court. While the implications of this procedure are far-reaching, I am convinced after a careful reading of the decision of the Supreme Court that the reasoning was logi-

cal. This suit, however, dwindles to insignificance when studied in the light of comparison with Senate Bill 1161, known as the Wagner-Murray Bill. While this is not the proper moment to analyze this amazing proposal, it may be said in passing that nothing ever proposed as legislation in this country has approached the colossal soiree in the field of socialization of private activities which this bill encompasses.

Hospital Corporations and the Practice of Medicine: For several years a growing tendency to encroach further into the practice of medicine by hospitals has been apparent to even casual observers. The House of Delegates almost yearly has considered some sort of resolution looking toward correction of the tendency. For instance, in 1937 the following language appears in a resolution unanimously endorsed: "The administration of anesthetics, the interpretation of roentgenograms, the interpretation of laboratory findings, and the application of physical therapy measures constitute the practice of medicine and should be confined to those who are licensed practitioners of medicine."

In the same year, the House adopted another resolution referring specifically to Group Hospitalization, and put itself on record as making the above apply to contracts for group hospitalization insurance plans. I am inviting your attention to this matter now, partly because this House of Delegates of the Kentucky State Medical Association will be asked to approve group hospitalization of statewide activity and to have representation on the board of that agency. Such endorsement is a state matter, and your body is the proper group to set up such limitations to group hospitalization as you deem right and equitable.

The Judicial Council of the A.M.A. has used the following language in defining the sphere of action of the A.M.A. and state associations:

"A profession has for its prime object the service it can render to humanity. The principle is the same in all sections of the country, but what is ethical in one place may be unethical in another as the result of different laws, different customs, different needs of the people. The Judicial Council of the A.M.A. cannot have knowledge of all these. Each state medical association should have the knowledge.** It would thus appear that such questions as the patient-physician relationship, the corporate practice of medicine, the separation of medical from hospital services in group hospitalization contracts, have been repeatedly considered and acted on by the House of Delegates of the A.M.A. These actions stand now, as before, as expressions of principle.** It would seem to be the responsibility of the State Medical Association to instigate measures seeking relief if the initiative to that end is not taken by the lawmakers ** of the state."

I would remind you that our national institutions, our American ways of life, are being silently destroyed by infiltration tactics, and if free medical practice is to be saved from both government and corporate interests, your sense of obligation to yourselves and the sick must be kept alive by constant awareness.

The minimal fundamentals should be stated to include:

(1) The subscriber's contract should exclude all medical services.

(2) Hospital service should be defined to include only room accommodations, such as bed, board, operating room, medicines, surgical dressings, and general nursing care.

(3) There should be an upper income level for subscribers.

(4) The hospitals should render service for subscribers at less than regular rates; if no consideration in rates is made for patients with limited means, group hospitalization plans lose claim to altruistic purpose and there is no justification for their existence. When hospitals lose the tradition of being institutions of charity and humanitarianism, the entire voluntary hospital system breaks down.

(5) All hospitals properly approved should be eligible to participate in any hospitalization insurance plans approved by this House of Delegates.

Wartime Graduate Medical Meetings: Through a joint committee representing the A.M.A., the American College of Physicians and the American College of Surgeons, arrangements have been made for wartime graduate meetings to be held at centers where large numbers of medical personnel are on active duty with the military forces. This undertaking has been endorsed by the Surgeons General of the Army, Navy and Public Health Service, and they are cooperating in an effort to make the meetings a success. Physicians in communities adjacent to military centers where these graduate meetings are held are at liberty to attend.

Reapportionment of Delegates: The Constitution and By-laws require a reapportionment of delegates from the state associations every three years. The total membership of the House of Delegates cannot exceed 175. The total membership of the Association on April 1, 1943, was 122,741. On that basis, each state association is entitled to one delegate for each 965 members or fraction thereof. Kentucky loses one delegate by this reapportionment. To have retained its original three it would have had to report 1931 members; instead, it reported only 1886. There are 2717 physicians licensed in the state; thirty per cent are not members of their county medical societies.

Statistical Data: The official membership list of the A.M.A. as of April 1, 1943, carried 122,741 names, an increase of 2040 over 1942.

The gross income of the A.M.A. for its fiscal year of 1942 was $1,975,236.30; expenditures, $1,644,820.96; investments, $2,541,309.16; interest on total value of property, $1,467,930.74; investments, $74,482.58; expenditures, wages and salaries, $548,302.57; legal and investigative, $64,449.71. Employees: 561.

Suits are now pending against the Association for libel, slander and claims amounting to $1,201,000. The net income from The Journal was $866,744.22. Five of the special journals were published at a loss of $16,027.96. Four produced a net income of $11,182.63; Journal Diseases of Children, Archives of Otolaryngology, Archives of Ophthalmology, and War Medicine.

Election of Officers

President Elect, Herman L. Kretschmer, Chicago.

Vice President, John W. Amesse, Denver.

Secretary, Olin West, Chicago.

Treasurer (nominated by Board of Trustees), Josiah J. Moore, Chicago.

Speaker of House, H. H. Shoulders Nashville.

Vice Speaker, R. W. Fouts, Omaha.

Board of Trustees, Wm. F. Braasch, Rochester, Minnesota; Ernest E. Irons, Chicago.

President Howard: We will now have the report of the Committee on Postgraduate Course, W. W. Nicholson, Louisville, Chairman.

Report of Committee on Post Graduate Course

Philip F. Barbour, Louisville:. Dr Nicholson is unavoidably detained and asked me to make this report.

The Reference Committee on Postgraduate Course of the Kentucky State Medical Association wishes to report that a meeting was held at Cadiz at which papers were presented before the Four County Medical Society by Alice D. Chenoweth and Philip F. Barbour, and clinical conferences were held at Corbin and Paducah at which papers on timely subjects were presented before the Whitley County Medical Society and the McCracken County Medical Society by J. Garland Sherrill and Philip F. Barbour. An extension course of lectures was held at Corbin during May and the lectures were so well attended and created so much interest among the doctors that we have been requested to give a similar course at Somerset during the current year, and probably at a third city sometime in the summer. The committee feels that a similar meeting should be held at Mayfield this fall.

The following doctors took part in the course: Drs. Percy Pelouze, Milton Wilder, Walter Doyle, J. B. Floyd, J. G. Sherrill, H. H. Caffee, A. D. Chenoweth, J. H. Kooser, Paul Turner, Oscar Miller.

By utilizing the physicians in the State Department of Health and other full-time men, these courses can be put on at a cost not to exceed $500. On account of the heavy work of the doctors in the state at this time, it is difficult to get a private practitioner to give sufficient of his time in preparing papers for these meetings, but it is hoped that after the conclusion of the war more and more of the prominent doctors can be aligned with these postgraduate courses.

The American Medical Association and the Association of American Medical Colleges are stressing the importance of establishing such courses and having them fully organized for the benefit of the doctors who will return from military service.

W. W. Nicholson, M. D., Chairman
J. Garland Sherrill
Philip F. Barbour

Mr. Chairman, I would like to say that after this report was written and presented to the Council by Dr. Nicholson, we found that new rations have been established for gasoline, and the committee is really up in the air as to whether to recommend holding a meeting at Mayfield in November. I have gotten up a program and have gotten the men to sign for it, but really we doubt whether it is wise

at this time, with the limitation of two gallons for each ration point, to put on this course in November. Personally, I feel that probably the doctors will be limited in the amount of gasoline that they can use and the men who are going to hold the meetings and present the papers will be limited in the amount of gasoline that they can use, and, as I understand, the OPA board here in the state is going to watch the output of gasoline very closely. The committee, I think, would not like to recommend the holding of a meeting at Mayfield, but feel that it is a point which should be passed upon by the House of Delegates itself.

I would like to move that the report be accepted and that the question of holding a meeting in Mayfield come up for discussion.

PRESIDENT HOWARD: You have heard the motion. Is there a second?

The motion was seconded.

JOHN W. SCOTT, Lexington: It seems to me such a detail as whether to hold this particular meeting at Mayfield should be submerged or included in the general question as to the policy of the Association in doing this, that, or the other thing. I think it would be more appropriate to discuss the general problem, plus other meetings such as this, rather than to say whether this meeting at Mayfield should or should not be held.

I am interested in Dr. Barbour's reaction to that idea. Don't you feel that it should be a broader question?

PHILIP F. BARBOUR: I think the question of having postgraduate courses in the state is one of which the American Medical Association and the Colleges have emphasized, that is the policy of having postgraduate courses carried on through the state. That is a thing which they very heartily have approved, and I think it is a wise plan to have them, because the meetings held at Corbin were so greatly appreciated by the doctors there that they asked us to repeat.

J. W. SCOTT: That being the case I would heartily agree with Dr. Barbour's position, but then this is a detail to be decided by the committee and should not be submitted to the House. I would feel that it should be referred to the committee and the House shouldn't be concerned with it.

W. BARNETT OWEN, Louisville: My reaction to that would be that it has already been ordered by the American Medical Association and the College of Physicians as being necessary in principle. Unless they have themselves cancelled such an order, I should think that it would be up to them, because that is the problem that not only affects Mayfield, but any other meetings that might be held. I think I would pass it back to them.

PHILIP F. BARBOUR: The committee hasn't ordered any specific program in any specific state. They advise that these be held.

SECRETARY BLACKERBY: I think you would be interested to know that Dr. Barbour succeeded in getting from the Commanding Officer down at Nashville, authority for Dr. Troutman, who now holds a commission and is located there, to come to the Mayfield postgraduate meeting, and in all probability he will be there. I think that fact alone indicates that Army officials as well as the American Medical Association and others see the advisability of that.

I may state further that in connection with this meeting, we took it up with the rationing authorities here in Louisville to get extra gasoline, an additional allowance for the doctors to attend this meeting on the ground that it was a postgraduate course as well as a meeting of the State Medical Association, and they were very sympathetic to the idea but would not take the authority to grant it; they appealed it to the Cleveland Office which ruled that they could not have an additional allotment of gasoline for this trip. It was later indicated to us that it would be all right for doctors to drive their cars and attend the meeting with the use of their rationed gasoline as a part of their routine medical service.

PHILIP F. BARBOUR: The program has already been prepared, so if the Association wants it we would be glad to put it through. It is a question whether the doctors feel they could take that amount of gas to attend.

J. A. ORR, Paris: It seems to me that this is not a question that affects the whole society. If there is any question about getting gasoline, it is up to the men down in the First District. I should think it would be left up to the men who would attend that meeting as to whether they want it or not. They will figure out a way to go if they want it.

PHILIP F. BARBOUR: The idea is that the Association has to authorize the payment of funds for the expenses of the meeting, of the doctors who attend it.

J. W. SCOTT: I move that we approve the meeting.

PRESIDENT HOWARD: There is a motion before the House.

PHILIP F. BARBOUR: I moved that the report be accepted and that the decision as to whether to hold this meeting at this particular time be passed to the House.

PRESIDENT HOWARD: Let's vote on Dr. Barbour's motion to approve the report. All in favor let it be known by saying "aye"; all opposed the same. The motion is carried. The report is approved and we have had some discussion. Is there further discussion on this?

J. W. SCOTT: I renew my motion that the House of Delegates approve the meeting at Mayfield.

The motion was seconded by T. Atchison Frazer, Marion.

SECRETARY BLACKERBY: Would you approve any other section?

J. W. SCOTT: Yes. I thought he wanted that specific thing. That was my point: that they ought to be included. May I amend it to approve the meeting at Mayfield and similar meetings which in the discretion of the committee are useful for educational purposes.

The motion was seconded.

PRESIDENT HOWARD: You have heard the motion as stated, gentlemen. Is there any discussion?

The motion was put to a vote and carried.

PRESIDENT HOWARD: We will have Dr. Lukins' report of the Medico-Legal Committee, which will be given by Barnett Owen.

REPORT OF MEDICO-LEGAL COMMITTEE

W. BARNETT OWEN, Louisville: Unfortunately, Dr. Lukins is ill today and is unable to present his report. He is the Chairman of this committee, and the chairmen of most committees have been instructed not only to write their own reports, but I think it has been the practice pretty much in past years, also to read them.

Your Medico-Legal Committee is proud to report that during this year, the number of malpractice suits filed against our members has been the lowest in twenty years. All together we have handled sixteen cases. Of these, ten were in court from last year. Three have come to trial, one in the Federal Court. Two have been compromised for a small amount. Several cases, by contacting the doctors in the community and by frank talks with the family, have been dropped. Most of the cases have been without merit. We regret to say, however, that there are still a few in which after study and investigation we were forced to the conclusion that the clinical conduct of the case could have been handled at least more diplomatically, if not more scientifically.

We wish to call attention to the fact that when a doctor tells a family that Mrs. X has an infection in the pelvis, it is always best not to specify the type of infection. This never does any good, usually leads to suspicion, and is very, very difficult to prove.

We were very gratified that this year there has been only one suit filed alleging bad results in a fracture. You will recall that up to a few years ago, fractures constituted 75 per cent of all cases. We understand that a postgraduate course is to be given at various county and district societies over the state, as it formerly was a few years ago, and we would like to suggest that fractures have a prominent place on these programs. The doctors do not need to learn orthopedic operations, but everyday handling of simple fractures like Colles, Potts, and fractures of the clavicle. May we again remind you that the use of the x-ray should always be advised.

The best method of preventing malpractice suits continues to be the proper education of our profession, mixed with the milk of human kindness. The staunch, reliable doctors over the state who come to the rescue of a fellowmember when he has been sued continues to be our strongest source of help. We ask no doctor when he is called to testify to go beyond the bounds of reason and honor. If it is an unjust case, as most of them are, these qualities will always win.

We urge the officers of each county society to see to it that the dues of the men in service are kept paid, as the courts have already decided that the simple fact that a doctor is in military service does not exonerate him from legal liability in the treatment of a case.

J. B. Lukins, Chairman
P. E. Blackerby
W. Barnett Owen
A. W. Davis

GEORGE H. WILSON, Lexington: I move the report be adopted.

The motion was seconded and carried.

PRESIDENT HOWARD: We will now have the report of the Committee on Crippled Children.

REPORT OF COMMITTEE ON CRIPPLED CHILDREN

W. BARNETT OWEN, Louisville: You have

had a report of the activities each year of the treatment and management of the crippled children situation in the state of Kentucky. Again we are coming to you as doctors, expressing our sincere thanks to you for the cooperation you have given. It isn't the orthopedic surgeons who do this work alone; every member of the State Association in every county has been most generous in help and cooperation, and without that it would be simply impossible for us to acquire the success which has come to this group. It is to your credit more than ours.

Like other agencies, the Kentucky Crippled Children Commission has felt the effect of the war upon its work. During the summer of 1942, five orthopedic surgeons on the professional staff of the Commission were called into the Armed Forces and the Commission has lost three orthopedic Public Health Nurses, two of whom are in the Army Nurses' Corps. This loss of trained personnel and lack of persons to replace them has necessarily curtailed the work and placed a greater burden on the remaining surgeons and nurses. Added to the loss of trained personnel, transportation difficulties have also presented a serious problem and the lack of hospital beds in the general hospitals in Louisville, due to the overcrowded conditions in the city, is likewise a serious handicap. This necessitates the majority of children who are hospitalized in Louisville being placed at Kosair Hospital for Crippled Children, and unfortunately the turnover is not as rapid as it has been in the past, which means that the children must remain in the hospital for a longer period of time.

SUMMARY OF CLINICS AND CLINIC EXAMINATIONS DURING BIENNIUM JULY 1, 1941 TO JUNE 30, 1943

	Fiscal Yr. ending 6-30-42	Fiscal Yr. ending 6-30-43	Total for Bien'm
Number of Itinerant Field Clinics	26	14	40
Number of counties included	81	53	
No. of examinations:			
At Itinerant Clinics	1743	969	2712
At weekly clinics (Lexington)	893	812	1705
At monthly clinics (Ashland)	232	202	434
Total clinic examinations	2868	1983	4851

The free clinic program has had to be revised so to take care of only those territories which serve the more remote areas and where periodic examinations are most necessary. In spite of limited personnel and transportation difficulties, every effort has been made to maintain efficient standards to meet the need for clinics and to provide proper orthopedic nursing supervision for children discharged from the hospital.

Since it has not been possible to hold as many itinerant clinics as in the past, we have worked out a plan, in cooperation with the county health departments, to hold what we call nurse-pediatric clinics. These clinics are held in the county health departments and are under the direction of Dr. Philip F. Barbour, pediatric consultant, and one of the Commission's orthopedic Public Health nurses. This plan was adopted in October 1942, and since that time 31 observation clinics have been held, with a total of 385 children examined. If further orthopedic treatment is recommended, the child is referred back to the orthopedic surgeon who originally treated him. This method enables the nurses to keep a close check on discharged cases and creates a closer cooperation between the Commission and the County Health Unit.

Another very interesting phase of the clinic program has been the establishment of clinics in connection with city and county health departments for Louisville and Jefferson County. Two clinics are held monthly in Louisville, one for white and one for colored children. In addition to this, a clinic is held in the county every quarter for both white and colored children living in Jefferson County. These clinics have been in effect since April of this year, and this method has curtailed the number of office visits for the children who live in Louisville and Jefferson County.

Follow-up work on discharged cases has also been done most effectively through correspondence. Letters are sent to the parents of children who have been discharged from the hospital wearing plaster, braces, or who are recommended to return for observation. The response to these letters has been most gratifying, and as a result of them a clinic is held almost daily in the Commission's headquarters in Louisville.

The following number of patients have passed through the office during the bien-

nium:

Fiscal year ending June 30, 1942	2,233
Fiscal year ending June 30, 1943	2,658
Total	4,891

Hospital admissions are as follows:

Fiscal year ending June 30, 1942	1,787
Fiscal year ending June 30, 1943	1,302
Total	3,089

Services rendered children exclusive of hospitalization, such as plaster casts, braces, artificial appliances, corrective shoes, etc., are as follows:

Fiscal year ending June 30, 1942	1,262
Fiscal year ending June 30, 1943	1,743
Total	3,005

A special ward for the treatment of acute cases of infantile paralysis was opened at the Kosair Hospital in Louisville during the summer of 1942. This was made possible through cooperation with the State Chapter of the National Foundation for Infantile Paralysis and the Board of Governors of the Kosair Hospital. We were fortunate in securing the services of a young man trained in the Kenny treatment. During the past year the Commission has arranged for Mr. Untereker to appear before clubs and public health groups and the medical profession to demonstrate the Kenny treatment. He has been most effective in training county health officers and public health nurses in giving emergency treatment in the home until such time as a child can be brought to the hospital.

A report from the State Department of Health states that the poliomyelitis season is usually from June through September. Thus far, 67 cases of acute poliomyelitis have been reported. Of this number, 41 cases have been hospitalized at Kosair Hospital and received the Kenny treatment. The situation doesn't seem as bad this year as last, since the number of cases is beginning to decrease. F. W. Caudill, State Epidemiologist, has kept in constant touch with the Commission, reporting all cases. He says that when the Commission removes an active case from a community into an isolated ward at the hospital, we help the State Department of Health in control of the disease and relieve the community of that source of infection. When we remove a primary or first case from the family circle, the possibility of the occurrence of a secondary case is reduced approximately fifty per cent.

In order to properly carry on the crippled children program, it is essential to have the continued cooperation of all agencies engaged in crippled children work, including health departments, medical profession, hospitals, and nurses. We can assure you that the work is being carried on in a most creditable manner, but there will always be much more to accomplish, such as physical correction, education, and vocational training.

Respectfully submitted,
W. Barnett Owen, Louisville, Chm.
Charles C. Garr, Lexington
Franklin Jelsma, Louisville
Leslie H. Winans, Ashland
C. M. McKinlay, Lexington

With respect to the slow turn-over in the hospital, I may explain that one reason is that about twenty per cent of those cases on an average have been acute infantile paralysis cases in our state and required considerably long hospitalization, longer than the average case.

J. A. Orr, Paris: I move the report be adopted.

The motion was seconded and carried.

President Howard: We will next have the report of the Committee on Medical Economics, Dr. C. C. Howard, of Glasgow, Chairman.

Report of Committee on Medical Economics

C. C. Howard, Glasgow: The Committee has decided to present one pressing problem for the action of the House of Delegates that is now in session, namely, the treatment of Kentucky's tubercular people, plus the education of the layman in its prevention. These 13,000 known active cases of tuberculosis if allowed to go untreated will infect 78,000 of our boys and girls.

Two thousand deaths from tuberculosis each year in Kentucky, with 1,300 new cases developing each year, is our present record. This is a casualty list of 3,300 of our people each year, greater than the Kentucky casualty list from the war zone. This goes on from year to year. We must meet this enemy on his own grounds and defeat him. It will take a modern medical army with all its equipment to do this.

Kentucky is a large state, with 3,000,000 people scattered over its hills and valleys. It is 500 miles from Ashland to Hickman; 250 miles from Harlan to Louisville; 250 miles from Louisville to Paducah. So you can well see that no one institution at any one place can adequately and economical-

ly care for these victims. Therefore, we recommend at least two additional adequate modern institutions, well equipped and staffed with the best in every respect, one for Western and one for Eastern Kentucky, plus Hazelwood with its addition which is now in progress. These three institutions to be built and operated at the expense of the State of Kentucky, under the planning and supervision of the State Commissioner of Health, assisted by three doctors, one from Eastern, one from Central and one from Western Kentucky; the selection of these doctors by the House of Delegates of the State Medical Society, that is now in session.

We also recommend that the present Medical Economics Committee with the Commissioner of Health be requested to appear before the Legislative Council this fall, and any other committees of the legislature that may see fit, to set in motion plans to carry out this program.

These institutions are to have as many free beds as needed for their district. The planning board shall decide on who is free after a thorough investigation of the financial status of every patient.

E. B. Bradley
G. L. Simpson
Guy Aud
Carl Norfleet
Clark Bailey
Burr Atkinson
C. C. Howard, Chairman

V. A. Stilley, Benton: I make a motion that Dr. Howard's report be received and filed and that the society go on record that we do need—we certainly do need—a hospital in Eastern Kentucky and one in Western Kentucky. It is too far now, as he said. We have too much tuberculosis; of course we all know that. It is not necessary to make that statement to this group of doctors. On the other hand, if we will take some steps to correct this we can do a lot of good. Every man who studies tuberculosis and thinks about tuberculosis and has it in a home knows very well that one case creates several potential cases in the home and in the community. I am very, very much in favor of the Doctor's report.

The motion was seconded by J. I. Greenwell, New Haven.

W. E. Gardner, Louisville: I understand this motion of Dr. Stilley's does not include approval of the report, but I believe Dr. Howard made some specific requests in there for appointment of some board or committee at this particular meeting. I think that part might be reread to see if the House of Delegates wants to approve that feature.

President Howard: Dr. Stilley's motion asked for the acceptance of the report and asked to have it filed. Dr. Gardner requests, Dr. Howard, that you read that part of the report that asks for the appointment of three men on a planning board.

C. C. Howard: That part was for three men, one from Eastern, one from Central, and one from Western Kentucky, who should serve and assist the Commissioner of Health in planning and operating these institutions. Our idea there was that this body shall represent the profession in selecting men that they think are capable to help carry this program through.

Frank Boyd, Paducah: Do you want it appointed at this meeting?

C. C. Howard: Yes, sir.

T. Atchison Frazer, Marion: Appointed by the President?

C. C. Howard: No, sir, appointed by this body.

John W. Scott, Lexington: Is that an operating committee?

C. C. Howard: A planning and supervision committee to assist the Commissioner of Health. That will have to be worked out.

J. W. Scott: Is that a matter of legislation?

C. C. Howard: No, sir, there doesn't have to be any legislation.

C. B. Johnson, Russell: Don't you think it would be a good idea to locate your hospital before you select that committee?

C. C. Howard: No, sir. This planning committee would have to go into all that and that would relieve your doctors.

C. B. Johnson: If you select a man from Eastern Kentucky and select him from Ashland or Harlan and locate the hospital at the other end, that man won't be worth a nickel.

C. C. Howard: I can't enter into all the politics that get into this. The planning committee with the Commissioner of Health surely could work out the detail and then they will have to work it out as to where would be the best place and the most economical place for these people, and if we can't trust our own three doctors on a committee we are in a bad way.

J. W. Scott: Do you think the legislature is going to turn this matter over to

the House of Delegates?

C. C. HOWARD: No, sir; no, sir. We are only assisting and advising the Commissioner of Health. I thought I made that plain.

W. E. GARDNER: It would be necessary for somebody to nominate these men.

C. C. HOWARD: You all nominate them.

W. E. GARDNER: You should do that.

C. C. HOWARD: No, sir; no, sir; you all select them yourselves.

T. A. FRAZER: I suggest Dr. Blackerby nominate the committee.

SMITHFIELD KEFFER, Grayson: No, sir; let each section nominate its own.

C. C. HOWARD: I stated that plainly. If you all want three men to serve with Dr. Blackerby, here's your chance. They should do it, we think. We recommend that; we think that is the best way. You all just select this committee to serve with him, like these other committees serve.

J. W. SCOTT: Let the President appoint them.

C. C. HOWARD: If you want the President to appoint them that will be alright, that will be satisfactory to the committee, either way you do it. We will gladly accept that. We thought perhaps you would want to select them, and we just wanted you to feel free to do as you please about that. You are the representatives of the medical profession.

PRESIDENT HOWARD: What is wrong with the House nominating them?

C. C. HOWARD: That is what we have in mind.

A. H. BUSH: This is one thing that I have always been very much interested in, and it is a thing that is finally going to have to be worked out by this state and all other states before we can do anything with this tuberculosis business. I don't know just exactly how all this is planned to be worked out, but it has always seemed to me that it is an almost impossible thing to do to take care of the tuberculosis that is in the State of Kentucky on account of the amount that it will cost to do it, and who is going to put up the money to do it? This is a terrible thing as far as Kentucky is concerned, and we have got to do something about it. This may be a start; I hope it is. It certainly will please me if it works out all right, but we have got to do something, and the sooner we do it the better off we will be. It is a terribly big job.

J. A. ORR, Paris: It seems to me that the selection of this committee should be a matter that would be determined with a little more consideration as to the availability of those to serve on this committee. It is impossible for this House of Delegates right here, right off the reel, to determine who is available and the best men to serve on this committee. It seems to me it would be a much better plan (and I have an idea that that is what Dr. Gardner had in mind) if this were decided at some later time, either by the President or the Council. It seems to me that the Council would be a proper means of deciding this question.

I move you, sir, that the report be amended so that it shall read that this committee shall be selected by the Council.

W. E. GARDNER: I second the motion.

PRESIDENT HOWARD: We will vote on the amendment. All in favor let it be known by saying "aye"; all opposed the same sign. The motion is carried.

Is there any further discussion on the original motion?

FRANK BOYD: This is all well and good, but the idea that Dr. Howard, as I understand, is trying to get over (and I feel the same about it) is that we ought not to put this thing off; it ought to be settled. You can appoint a committee or have the Council appoint a committee at this annual session so they can get started on this work. If you put it off a while, you go over to another year. That is the bane of the whole business, delay and procrastination. I don't think you will ever find a better time to do it than to start this thing right now. I am in favor of letting the Chair appoint a committee or of acting on the motion that the Council do it, or of appointing a committee to get together and report to the session of the House tomorrow morning as to who would be the best committee, but get it over at this meeting of the Association; don't put it off another year.

SECRETARY BLACKERBY: Dr. Vance, isn't there a plan for a meeting of the Council before the Councilors leave?

C. A. VANCE, Lexington: Yes, right after the meeting at eight o'clock Wednesday morning.

FRANK BOYD: I move that the House ask the Council to appoint these men before the adjournment of the session.

The motion was seconded by Dr. Frazer.

PRESIDENT HOWARD: There is a motion before the House, Dr. Boyd, to approve the report that Dr. Howard read, with the amendment which has already passed.

Let me see if I can help just a little bit on this matter. We all know that all we can do for tuberculosis in our state, all that we can do toward ridding the state of it, is going to be too little. Even with the fact that we have passed this resolution, that we have our committees, and all that we can do, it still is not within our power to build hospitals. We have to go to our Legislature and work like Trojans to get that done, unless we should be fortunate enough to get it done through the Governor, as we did in the case of our Tuberculosis Sanatorium at Hazelwood.

In order to expedite matters, suppose that we have a nominating committee appointed to meet with the suggestion that Dr. Orr made, to nominate somebody from the western part of the state and somebody from the eastern part of the state, to report at our last session and then act on this matter, if it is the pleasure of the House of Delegates and the Council that they want to do that. If you think that would be proper we can get through with this now and not delay these other reports that are scheduled.

J. A. Orr: Mr. Chairman, hasn't this question already been voted on?

President Howard: No. You voted on the amendment.

J. A. Orr: The amendment carried.

President Howard: Yes, the amendment carried. Now we vote on the original motion.

J. A. Orr: I move the adoption of the report.

President Howard: There is a motion already before the House to do that. We are just discussing it.

J. A. Orr: I call for the question, then.

President Howard: If there is no further discussion, the motion before the House is to adopt the report as read by C. C. Howard. Dr. Howard, may I ask you to allow me to say that we will have a nominating committee to report back?

C. C. Howard: I think in accepting Dr. Orr's motion, and that carried, that we gladly let the Council appoint or select the three doctors, if we adopt this it is already in operation, and Dr. Vance says the Council will meet before the session is over and they can appoint the three men who shall serve, and I think that will solve it. I suggest we vote.

President Howard: All in favor of the motion as stated let it be known by saying "aye"; any opposition by the same sign. The motion is carried.

W. B. Atkinson, Campbellsville: I move you that the Committee on Constitution and By-laws be instructed to make this a standing committee of the Kentucky State Medical Association.

The motion was seconded.

President Howard: All in favor say "aye"; opposed. It is carried.

J. A. Orr: It seems to me that this Association is overburdened with permanent committees now. This committee is just a thing that is in embryo to discuss the advisability as to what might be done. We don't know what will be done in the future about these things. It seems to me that the committee can stand as it is without making any more permanent committees.

J. W. Scott: Isn't it a fact that a little more formality has to be gone through with to change the By-laws than a motion from the floor here? I am not a parliamentarian, but I know we had quite a little wrangle a few years ago and struggled a year over changes in the Constitution, and I think Dr. McBee will testify that we haven't got to first base in a year, and here we are going to pass a change in the By-laws just like that.

President Howard: I'm sorry, but we want to get along. I don't know how much trouble it would take to change them. The fact that every man can express his opinion is what makes this country so great. If there is any further discussion on this matter, let's have it.

Major Atkinson: It would have to lay over and be ratified at the next session to make it a permanent committee, but I was starting it off.

President Howard: Gentlemen, there are lots of experienced parliamentarians here. If there is further discussion, let's have it.

T. A. Frazer: You can suspend any rule by unanimous consent. If anyone objects to it, it is all over.

W. E. Gardner: I might suggest to Major Atkinson that this committee serve a year's probation and let it demonstrate whether or not it would justify amendment of the By-laws to make it a permanent committee.

Major Atkinson: I will withdraw my motion.

President Howard: The motion is withdrawn.

The next report will be the report of the Committee on Hospital Standardization, by W. L. Tyler, Chairman.

Report of Committee on Hospital Standardization

W. L. Tyler, Owensboro: Mr. President and Gentlemen: The Committee on Standardization of Hospitals in the State of Kentucky desires to call your attention to the fact that a bill for this purpose was presented to the House of Delegates and approved in 1941.

This bill was presented to the State Legislature at its session in 1942 but failed to pass. The Committee on Public Relations at its meeting in September of that year stated that the bill would be presented again in 1944.

With the necessity of hospitalization in the State of Kentucky increasing and the demand for adequate hospitalization growing daily, we think it will be necessary for the public good for some legislation to fix some specific standardization for hospitals which would give dependable service and meet the needs of each particular community in the State of Kentucky.

I would like to emphasize that standardization of hospitals should be as to meet the demands and the necessity of each community wherein there was necessity for it.

O. O. Miller, Vice President, Louisville, took the Chair.

Vice President Miller: Next is the report of the Auditing Committee.

Report of Auditing Committee

Secretary Blackerby: In the absence of M. J. Henry, Louisville, Chairman, I will read the Auditing Committee's report:

The Auditing Committee has examined the report of the Treasurer, A. W. Davis, as compiled by Heimerdinger and Dennis, Public Accountants of Louisville, Kentucky, and found no errors. This report in detail was published in the Annual Number of the Journal of the Kentucky State Medical Association, where those interested may examine it.

E. S. Dunham
George F. Doyle
M. J. Henry, Chairman

Carl Norfleet, Somerset: I move the adoption of the report.

The motion was seconded and carried.

A. W. Davis, Madisonville: We have quite a surplus and I suggested this morning that that be put in Government bonds, and I think you said that you would delay that until you got the committee report.

Vice President Miller: That is correct. What is the pleasure of the House in regard to the surplus in the treasury?

T. Atchison Frazer, Marion: I move it be put in Government bonds.

The motion was seconded.

Vice President Miller: It has been duly moved and seconded that the surplus in the treasury be placed in Government bonds. Is there any discussion? All those in favor say "aye"; contrary "no," and the motion is carried.

Next is the report of the Committee on Report of Council, Dr. Blackburn. (Not present.)

The next report is that of the Delegate to the Convention for the Revision of the U. S. Pharmacopoeia, Virgil E. Simpson, Louisville, Chairman. (Not present.)

We will, then, hear from Dr. Paul Turner, Chairman of the Advisory Committee on Tuberculosis.

Report of Advisory Committee on Tuberculosis

Paul Turner, Louisville: In the early part of September, 1943, just a few weeks ago, the President of the Kentucky State Medical Association, Dr. E. M. Howard, appointed a Tuberculosis Committee to represent the Association. This committee consists of:

Virgil Simpson, Louisville.
Maurice G. Buckles, Louisville.
John B. Floyd, State Department of Health.
Benjamin L. Brock, Waverly Hills.
Palmer Reed, Paducah.
Charles J. Farrell, Covington
Paul A. Turner, Hazelwood Sanatorium, Louisville, Chairman.

All the members of this committee are either Fellows or Associate Fellows of the American College of Chest Physicians. They are also members of the Trudeau Society, which is the medical section of the National Tuberculosis Association.

The object of this committee is to create a better understanding among both the medical profession and the laity of the modern concepts and advances made in the prevention, diagnosis, and treatment of pulmonary tuberculosis. This committee with the members in close touch with all tuberculosis problems, should be able to well represent the Association in any tuberculosis program which is under way at the present time and which may be undertaken in the future.

Naturally, as the committee was appointed only a short time ago, we have not even a report of progress. We ask,

therefore that the committee be continued as a committee of this Association.

VICE PRESIDENT MILLER: Gentlemen, you have heard the reading of this report. What is your pleasure?

W. B. ATKINSON, Campbellsville: I move its adoption.

The motion was seconded and carried.

VICE PRESIDENT MILLER: We are ready to take up the report of the Committee on Publicity, Dr. John G. Clem, Louisville, Chairman. (Not present.)

Report of the Committee on Technical Exhibits, Dr. V. A. Stilley, Benton, Chairman. (Not present.)

Report of the Committee on Public Health Problems in War, E. B. Underwood, Chairman.

REPORT OF COMMITTEE ON PUBLIC HEALTH PROBLEMS IN WAR

E. B. UNDERWOOD, Morganfield: I will say at the outset that I feel very honored to make this report again this year. The other members of the committee are Charles D. Cawood of Lexington and Hugh R. Leavell of Louisville.

I also would say at the beginning that we can only state some facts that are well known by you. We might group the problems of public health as connected with the war into three groups: The first group would be all of those connected with shortages of various kinds. The first and foremost shortage is that of medical personnel. That is true with private practitioners and with health officers alike. The problem with respect to health officers has been met in some degree by the use of so-called lend-lease health officers made available through the United States Public Health Service. It has been met also by combining two or more counties under the direction of one health officer. The shortage in private practitioners has been met only in a small degree by various activities of Civilian Defense and Red Cross. It has been partially met by the various private practitioners cutting out as many unessential services as possible, making available as many essential services as they possibly can.

The next and most important shortage that we have been up against has been the shortage of registered nurses. This has been true with private practitioners, hospitals and public health, especially so since nurses have been called upon to do many duties that doctors formerly performed.

We might mention, third, the shortage in various other types of personnel. It is very much like a dairyman said the other day: that he had to pay quite a bit more to get workers on his place now and he had to hire two of them to do what one of them used to do.

The fourth shortage would be that connected with transportation. In public health work we have tried to meet that by establishing clinics in various strategic positions, making the services more available to the people in local communities.

For the second group of problems that have arisen in public health and wartime activities, those due to the increase in population as the result of the creation of communities known as defense areas, in these communities special emphasis has been placed upon sanitation, all forms of communicable disease control, maternal and child health activities.

In the third group we might classify all other problems.

We recommend to the House of Delegates: First, that we continue to meet the problems that arise in a common-sense manner, using all the ingenuity that Americans are capable of; secondly, that we work together in the future as in the past in a spirit of cooperation; and, third, that as in the past we continue to lay especial emphasis upon the prevention of disease and the prevention of accidents of all kinds.

VICE PRESIDENT MILLER: You have heard the report of the Committee on Public Health Problems in War. What is your pleasure?

FRANK BOYD, Paducah: I move it be accepted and filed.

The motion was seconded.

JOHN W. SCOTT, Lexington: I was impressed with the Doctor's report on the objectives of the Public Health Service. At the same time, I think that I am impressed, as I believe most of you are impressed, that the Public Health Office in the community is the least hard-worked member of the medical profession. In Lexington we have two excellent health officers, just exactly the quota we had in the piping times of peace. Our effective force of physicians has been cut to the bone and the men are working like dogs. The health officers are still numerically what they were before, and I think I may say with certainly no criticism of them, they are both excellent men, that it is only fair to have the health officer a little

short and have to work a little overtime and a little less able to keep bankers' hours, just like the rest of us. I don't know what the experience of the other men is, but my observation and my belief is that there is less overtime put in by health officers than any other physician unless he is in some kind of a government institution, of course they have bankers' hours, notoriously. I just wonder why that is so. If the Doctor knows anything about that and if it is pertinent to discuss it, it would be very interesting to me to hear what he would have to say about that.

VICE PRESIDENT MILLER: You are not proposing that the health department go into the practice of medicine, are you?

J. W. SCOTT: No, sir, but that they should go into the uniform of their country. Many of them, like our two men in Lexington, have strained every effort to get into uniform; they have tried, and are very restless about not being in uniform, but I do think that some of these fellows should be released to the Army.

BRUCE UNDERWOOD: I can certainly reply to that and would be glad to, but I would feel that Dr. Stilley or Dr. Blackerby would be much more qualified to reply than I. I have certainly got an answer for him.

SECRETARY BLACKERBY: I think that Dr. Underwood could make the answer out of his own experience. I do know that located as he is, with two counties on his hands, he probably works as hard as any man in the profession in Kentucky. I know that the people in those two counties have a sense that Dr. Underwood is making a contribution that is essential. I know also that the doctors of the two counties down there are cooperating with him a hundred per cent. He is putting over a good program, putting over an essential program. That is true in a great many places in the State of Kentucky where these younger men have been retained.

It might be of interest to you to know, Dr. Scott, that we have lost either to major industries or to the United States Army or Navy, over thirty of our health officers since the war started, and as was stated in a report here this morning, we have had to make combinations of counties in Kentucky, two and three counties. We have a combination, for instance, of the counties of Whitley and of Laurel and of Knox, with over 80,000 population. We have a combination of Clay and of Jackson. Some sixty-odd counties in the state have been combined in order to maintain as effective a health service as we possibly could, and these men are working hard, Dr. Scott.

J. W. SCOTT: What about Fayette?

SECRETARY BLACKERBY: In Fayette County you have a number of military activities. Dr. Scott will recall that in Fayette County a number of investigations were made that threw upon the health department of the county the burden of additional effort in connection with the control of venereal disease, and in that county I think probably is maintained either the second or third largest venereal disease control clinic in the state.

The two doctors in Fayette County, in addition to the work in the county, have taken over the responsibility for the venereal disease control program in Scott County and have been carrying that now for a year, and you will be interested to know that the health officer of Scott County went into the Armed Service; the assistant health officer in Fayette County is doing the venereal disease control work in the county, and fifty miles away the health officer of Bracken County is going to Scott County and giving two and three days a week for the routine public health program in that county.

Dr. Scott knows as well as I do that they have a heavy program in Fayette County in connection with public health. They have carried, I think, one of the most intensive and one of the most satisfactory sanitation programs that we have had anywhere.

I would like to call attention to the fact that over a year ago the Secretary of the Navy and the Secretary of War wrote Governor Johnson a letter and asked him to gear up the public health forces of the state, the administrative forces of the state under his own direction, the courts and the prosecuting authorities of the state in the control of venereal disease, and we know that probably nothing in public health or in medicine has received attention more intensively than the control of venereal disease in the state.

Our public health officers in the state have responsibility for the control of all communicable diseases, for intensifying their program in venereal disease, for intensifying their program in sanitation, and they are doing a job harder than ever before because of the concentration of populations in the larger centers, and of the

necessity of combinations of counties in others.

I believe most of the doctors here from counties where they have fulltime health departments will agree with me that these men are giving their time and they are carrying on an essential program that is responsive to the people's demands and to the needs of their communities.

I do not rise with any necessity or feeling for any defense of the work of the health officers in the state. They are just as much servants of the profession of the state as I am. They have just as great an obligation to the people of the state as I have in my position as State Health Commissioner, and I hope that you men in your own knowledge of what is going on in the counties in your particular areas, whether it is a combination or whether it is a single county unit, will at all times put your county health officer on record with me as State Health Commissioner as to whether in your judgment he is discharging his duty to the people of the county that he is undertaking to serve.

G. Y. Graves, Bowling Green: I want to speak about the matter of nurses in the state. With us in Bowling Green it is a very serious problem. We don't have enough nurses. That is due to the fact that a lot of our nurses are in the Army; it is due to some of the married nurses prospering, and to the further fact that we have concentrated all the training facilities in the larger cities and have no possibility of training our own nurses. I think that every place in the state is having just about the same problem that we are having down there, and in my opinion the State Medical Association should examine the present nursing program in its entirety. We have streamlined everything else and have a lot of frills in connection with the nursing program that may be necessary to turn out good nurses and that may not be. A good nurse is one that can carry out orders.

I think that in these smaller hospitals we can train our nurses and train them satisfactorily. We know what we want in our nurses, and I think we ought to examine this program and see if we can't get sufficient nurses. I don't think we will get them anyway until we start letting the smaller hospitals have nurses' training schools. I would like the opinion of the society as to the proper method of going abut relieving this shortage.

Vice President Miller: Is there a second to the motion of Dr. Underwood's report?

J. A. Frazer: I second it.

The motion was carried.

Vice President Miller: The next report is that on Scientific Exhibits, Dr. Harry M. Weeter, Chairman. (Not present.)

Report of the Committee on Medical Education, Marion F. Beard, Chairman.

Report of Committee on Medical Education

Marion F. Beard, Louisville: The Reference Committee on Medical Education has received from members of the Society in the Armed Forces a number of inquiries in regard to postwar refresher courses. We feel that the time has come to consider this subject in detail and make the following recommendation.

It is proposed that the House of Delegates of the Kentucky State Medical Society create a committee with powers to study the needs for postwar refresher courses, study the best ways and means by which they may be set up, and prepare a detailed program to be put into effect when the members begin to return.

Ernest B. Bradley
Frank A. Simon
M. F. Beard, Chairman
John Walker Moore, Consultant

W. E. Gardner: I move it be adopted.

The motion was seconded and carried.

Vice President Miller: Report of the Committee on Diseases of the Heart, Emmet F. Horine, Chairman. (Not present.)

Report of Committee on Medical Ethics, Guy Aud, Chairman.

Report of Committee on Medical Ethics

Guy Aud, Louisville: Since no case of infraction of the rules of conduct governing the members of this Association has been referred to your Committee on Medical Ethics during the past year, the Committee would like to take this opportunity of restating some of the principles of medical ethics to which we subscribe.

As you know, the Kentucky State Medical Association adopted and is governed by the Principles of Medical Ethics of the American Medical Association. This should be the practice of every state society in the United States in order that there might be but one rule of conduct governing the entire medical profession of America, rather than a separate code for each state.

The principles of Medical Ethics as adopted by this Association is but a statement of the underlying principles of con-

duct which apply to the relation of every physician with his patients, with the public and with his fellow-practitioners of medicine. The principles are not laws to govern actions in detail, but to guide conduct. The basic principle underlying all ramifications of a doctor's professional life is stated in the opening sentences of the published Principles of Medical Ethics: "A profession has for its prime object the service it can render to humanity; reward or financial gain should be a subordinate consideration. The practice of medicine is a profession. In choosing this profession an individual assumes an obligation to conduct himself in accord with its ideals." That has been the basic principle of medical ethics since the time of Hippocrates. Medicine's methods may change, its economics may change, its science may change, but its principles of Ethics do not change. Government and law may disrupt and negate the operation of our Principles of Medical Ethics for a time or in part, but it always will remain the principles of right conduct for our profession and will prevail just as long as government and law permit.

Respectfully submitted,
Karl D. Winter
T. A. Frazer
Guy Aud, Chairman

J. A. Orr, Paris: I move the adoption of the report.

The motion was seconded and carried.

Vice President Miller: The next report is that of the Advisory Committee to the Director of Hospitals and Mental Hygiene, W. E. Gardner, Louisville, Chairman.

Report of Advisory Committee to Director of Hospitals and Mental Hygiene

W. E. Gardner, Louisville: It is with feelings of genuine sorrow that our committee approaches its report this year inasmuch as we have recently lost by death its most stimulating member and the one who had the greatest influence within the past ten or more years of getting started the present state hospital program which has done so much in improving the facilities for the care of the mentally ill in Kentucky. Words are inadequate to express our admiration for the personal qualities and professional accomplishments of this outstanding public health officer and medical statesman, but we are deeply sensitive to the fact that in the passing of Arthur T. McCormack the medical profession of this state and the nation has suffered a tremendous loss which will be more fully realized in the years to come. He held the confidence and esteem of public officials for the generation which corresponded to the active period of his life, and while his major interest for many years was the development of adequate and well-staffed county health units throughout the state, he was in recent years fully conscious of the need of a complete rehabilitation of our public hospitals, and when the urgency of this need was given so much prominence at the State Conference for Social Work in Berea, Kentucky, at its annual session of 1933, it was Dr. McCormack who nominated for President of the Conference a young newspaper editor of Richmond, Kentucky, who was unanimously elected by acclamation and who is now Honorable Keen Johnson, Governor of Kentucky. It is noted that this was not only clever political foresight, but evidence of an almost uncanny judgment of a man who would some day be elevated to a position in which he could really do something about a "Public Welfare Program for Kentucky," which latter was the theme for that particular conference, and at which your Chairman had the privilege of presenting a paper.

Our committee has held two informal meetings with Governor Johnson, Commissioner Frost and Director Lyon within the past year, at which matters pertaining to further improvement of the services of the various state hospitals were discussed, and individuual members of the committee have made visits to the hospitals most accessible to them, as occasion warranted, or when requested by Dr. Lyon or any of the superintendents. Most of you are more or less familiar, through newspaper items from time to time, with the progress of the vast amount of work that has been initiated in improving the physical facilities of the various hospitals, within the past two years, and the sustained effort which has been made to raise and keep the professional and nursing personnel up to at least a minimum standard of efficiency. There have been numerous obstacles which have interferred with such an attainment, as most of you can imagine, but we are glad to report that political partisanship is no longer a consideration in the employment of any individual in the various departments of the hospitals. All of the superintendents will testify to this fact, and have been given free rein to employ anybody whom they

desired and to discharge those who were inefficient, regardless of political influence.

As an example of the difficulty in holding suitable employees on account of the competitive activities of numerous war industries, it is noted that at one of the hospitals where the normal complement of employees is 228, during the past year it was necessary to employ 278 people to maintain the original number of 228 required, which indicates very definitely that there was much more than 100 per cent turnover in personnel. Other hospitals had a comparable but somewhat less striking experience. In spite of the great turnover in personnel, accompanied by limited professional staffs, at the close of the fiscal year there were 157 patients less in the three state hospitals than at the beginning of the year; 1116 patients were paroled from all the hospitals within the year, and the ratio of outright discharges was greater than in the preceding year. There were 1645 admissions and 750 deaths.

While there is still considerable lack of equipment and other facilities, along with inadequate attendant and nursing personnel, to carry out a well-rounded therapeutic program for the treatment of the mentally ill, the clinical service has been greatly improved in all the mental hospitals within the past two years, as the result of some indispensable modern equipment which was installed and the tremendous improvement of diets, both as to quality and quantity of foods. Shock therapy in various forms, which has been an established procedure in all the hospitals for the past two years, is still being used in properly selected cases, along with previously utilized and better known hydrotherapeutic processes. There is, furthermore, a renewed interest in the importance of occupational therapy, perhaps the most effective aid to individual and group psychotherapy. An amusement program consisting of games, dances, picture shows, etc., is maintained as an additional therapeutic procedure, and beauty parlors are being utilized beneficially. In spite of existing handicaps, therefore, the personnel of all the hospitals are doing their best and deserve commendation for the type of service rendered and the results accomplished. It is obvious that an additional service should be given in the prevention of mental diseases and in the further rehabilitation of those returned to society from the mental hospitals. Consequently, an endeavor is being made to establish mental hygiene clinics in various counties of the state in connection with the county health departments. This service has, however, been greatly handicapped by lack of personnel, not only in the division of hospitals and mental hygiene, but in the health departments as well. Throughout this difficult period, with all of its inconveniences of crowding and shifting of patients from one building to another, Dr. Lyons and all of the superintendents have manifested unusual patience, splendid foresight and conspicuous teamwork which has attracted the admiration of all those who are at all familiar with what is being done. Back of it all has stood Commissioner Frost with an intelligent and sympathetic understanding of the great need of these and other improvements, both in plants and personnel; and finally, to the mainspring of the whole movement, our own Governor Johnson, with his dynamic interest and indefatigable energy, this association and the entire state is indebted for his influence in securing the largest annual appropriations which have ever been made for advancement of the hospitals and for the magnificent progress which has already been made under his leadership.

Respectfully submitted,
Irvin Abell
P. E. Blackerby
E. B. Bradley
W. E. Gary
C. C. Howard
E. M. Howard
W. E. Gardner, Chairman.

VICE PRESIDENT MILLER: Dr. Blackerby has a statement to supplement this.

SECRETARY BLACKERBY: Dr. Gardner expected Dr. Lyon to be here. Unfortunately, he is not.

There appears in a bulletin of the State Board of Health being issued now, which will be sent to all the doctors, something of the breakdown of the total amount, which I think runs somewhere in the neighborhood of four million dollars, total money allocated for the reconstruction program of our mental institutions including the tuberculosis sanatorium.

Dr. Lyon wrote to Dr. Gardner as follows: "At Eastern State Hospital, Lexington, there was spent, up to July 1, 1943, $725,810 in the reconstruction program. The capacity of this hospital has been increased some 300. This is in addition to quite a lot of permanent repairs and nec-

essary equipment. There is now work in progress at this hospital which is estimated to cost $300,000.

At Central State Hospital, Lakeland, there was spent, up to July 1, 1943, $590,463; and there is work now in progress which is estimated to cost $478,000 in the administration building. In addition to this, the construction of a new section for colored patients, at an estimated cost of $400,000.

At Western State Hospital, Hopkinsville, up to July 1, 1943, there was spent $343,198 for permanent repairs and construction of a new building for the care of untidy male patients; also water filtration plant and new sewage system. Work now in progress, which will be completed within the next few months, is estimated to cost $421,500.

From the above you will note the total amount already paid out for rehabilitation of the three hospitals is $1,659,471; and for work now in progress, either by contract or planned work, totals $1,599,500."

He goes ahead and gives the average daily population which I think was cut. In addition, there is $100,000 for the Institution for the Feebleminded at Frankfort, and he does not include in this the amount of money that was spent at the Greendale Reform School. I think that approximates half million dollars.

W. E. GARDNER: That is not technically within his division. This is just the three hospitals and the Feebleminded Institution.

SECRETARY BLACKERBY: As I started to say, I think there has been expended for the reconstruction of all of the institutions caring for the wards of the state and including the state tuberculosis sanatorium when it is completed, approximately four million dollars, and the amount for Hazelwood is $537,500 for the new building out there.

The President, Dr. E. M. Howard, resumed the Chair.

PRESIDENT HOWARD: Gentlemen, you have heard Dr. Gardner's report. What is your pleasure?

ROBERT SORY, Richmond: I move its adoption.

The motion was seconded and carried.

PRESIDENT HOWARD: Next is the report of the Committee on Control of Cancer, Dr. Wallace Frank, Louisville, Chairman. The report has been received.

JOHN W. SCOTT: I move it be received and filed.

The motion was seconded and carried, and the report follows.

REPORT OF COMMITTEE ON CONTROL OF CANCER

Due to wartime conditions, the rationing of gasoline and tires, the district meetings throughout the state were much fewer this year than heretofore. Several clinics, however, were held which were well attended.

It is to be regretted that we still see patients with tumors in the breast who inform us that the physician has told them, "If it does not bother you, you don't bother it." We realize that the exact diagnosis of a tumor in a woman's breast is sometimes difficult to make. At the same time we must consider the fact that the tumor in the breast is an abnormal condition and should always be removed and the tissue excised subjected to microscopic study. It is only by the attention to these tumors when they are small that we can ever hope to reduce the mortality of cancer of the breast.

Your committee would also like to remind you that one of the greatest enemies of mankind is cancer. Sooner or later the present conflict between the various nations of the globe will terminate, but our fight against cancer will still go on and must continue until we have solved the cancer problem. We would urge, therefore, that at least one meeting a year be confined to some phase of cancer by every county medical society within the state, and that some aspect of the subject be discussed at the various district meetings.

Respectfully submitted,
L. Wallace Frank, Chairman
Francis M. Massie
Henry V. Johnson.

SUPPLEMENT—1943 REPORT ON CANCER CONTROL

To the everlasting honor and glory of the medical profession, the doctors of the country, with the approval of the American College of Surgeons, have over a period of years worked together for the establishment of clinics for the examination and treatment of persons afflicted with the scourge of cancer.

Cancer as a cause of death ranks second in the United States, and the reason is plainly evident. The diagnosis and treatment of this disease is slow and expensive, and a large group of persons who suffer from cancer are unable to pay for the needed treatment. They put off visits to the doctor because of dread of his verdict,

and thus many lives which could be saved if they had received early treatment never have a chance.

To combat this fear and delay among the poor and to give encouragement to those of whom cure was possible, clinics were opened in Kentucky at St. Joseph's Infirmary in 1932 and at Norton Infirmary in the same year. Since 1936, the Kentucky Division of the Women's Field Army of the American Society for the Control of Cancer has cooperated with the doctors and hospitals in our fight for cancer control. It undertakes to carry on a year-around campaign to familiarize the public with the symptoms of the disease and to keep it warned of the necessity for early care. It has also assumed the financial care of indigent patients who have received treatment through the clinics, in addition to paying traveling expenses to and from the clinics for patients who otherwise would have been unable to attend.

The doctors who are interested in cancer control give generously of their service at the diagnostic clinics and also of their work in operating, treating and caring for these patients.

The contribution of space and nurses is the gift of institutions in which the clinics are held, and when necessary hospitalization is provided for indigents.

About twenty doctors can be relied on to do their share of work at the clinic of St. Joseph's Infirmary, and at least four or five are in regular attendance at the weekly clinic. At Lexington, at least six doctors are always ready to give their service. At Norton Infirmary and Middlesboro Hospital, two doctors assume charge and responsibility for the clinics. Many doctors who were interested in these clinics have gone into service, but those available do not spare themselves in any way in their contributions to this vital work.

To realize the growth of the work of the clinics, an examination of clinic reports is enlightening. In 1941, $1,000 was made available to one of the clinics through the Women's Field Army for the care and treatment of indigent patients. At the end of the year, the hospital had spent $943.67. In the year 1942-43, the same clinic has used for indigent patients $1,890.25.

During the last year, 635 patients were examined through our six clinics. Many of them entered hospitals for treatment. The remainder were given the peace of mind to which they were entitled.

To carry on the educational program of cancer control, over 125,000 pieces of educational literature were distributed throughout the state by the Women's Field Army. This literature described early symptoms and urged immediate care.

During the month of April, doctors through the radio gave of their time and knowledge to spread information concerning cancer, and the Speakers' Bureau of the Women's Field Army supplied a constant demand for talks on the subject of cancer in various parts of the state.

Exhibits were held at several state conventions, motion picture films embodying cancer facts were shown, and a decorated float in the Armistice Day Parade at Louisville served to call the public's attention to cancer control work.

The Louisville Council of Girl Scouts and the Covington, Kentucky, Girl Scout Association lent their aid in making house-to-house canvasses for cancer control in various city districts. The result of their educational campaign has been immeasurable. In handling the educational literature for distribution, they had an opportunity to become acquainted with the work and to familiarize themselves with the literature they handled at a time of life when the mind is open to strong impressions.

A new project in education was initiated by Mrs. Roy E. Tully, Louisville, Chairman of Booths, and a member of the Speakers' Bureau. In the classroom period of Nurses' Aides Corps training, she gave a talk as part of the required course to each group on the subject of cancer and its control. She also regularly addressed nurses who are teaching home nursing classes. Thus, a large group of interested persons were given the responsibility of spreading cancer control information.

The Women's Field Army reports that one of the most heartening phases of its work is the continued support, help and cooperation of a group of chairmen throughout the state. Since the public was first asked to help support cancer control, these women have faithfully carried on the educational program and have collected contributions necessary for the support of this project. Records from 1939 show some amazing increases in results due entirely to the efforts of these workers and the goodwill they have engendered for the cause of cancer control.

The clubwomen of the state have been

among the foremost supporters and promoters of this work. Since its organization in Kentucky, they have lent it encouragement and financial support.

Education of the colored people in the state was undertaken under the efficient leadership of Mrs. Alice B. Crutcher. Response to her campaign was very encouraging. The work of this group is conscientious and earnest. The facilities of the Red Cross Hospital, Louisville, do not allow space for a clinic. The doctors of the other clinics examine these patients, and they are hospitalized at the Red Cross Hospital.

The annual state meeting of the Women's Field Army was held in Louisville on March 30, 1943, and was well attended. Mrs. John S. Harvey, of Huntington, West Virginia, Regional Director, and Mrs. H. G. Reynolds, Paducah, spoke at the meeting.

A district meeting in Lexington was addressed by Mrs. H. B. Ritchie, Athens, Georgia, National Deputy Commander, Mrs. Harvey, Mrs. H. G. Reynolds, and Mrs. T. C. Carroll, State Commander.

A state conference for the Colored Division was held in Lexington on March 31, 1943, and talks were made by Mrs. Ritchie and Mrs. Carroll.

The regret of the Women's Field Army is that the organization is unable to help the incurable cancer patients who appeal to it. To be compelled to turn aside and refuse pleas for assistance for this pitiful group of sufferers is most unpleasant, but inasmuch as the organization is small, it is felt that assistance must be given to those who have a chance to survive.

Extensive educational campaigns have brought an increase in requests for assistance to the clinics, and despite war and its overwhelming demands, the campaign for funds to enable the Women's Field Army to carry on its work of education and care of indigents was encouraging. Although the average contribution was small, the amount of receipts for the 1943 campaign totaled $18,546.24; an increase of $4,900.40 over 1942.

A very splendid annual contribution to the work of the Kentucky Field Army is the gift of Mr. J. Graham Brown for office space at 321 Brown Building, Louisville, which is used for state headquarters.

The public has really begun to show consciousness of the work of the clinics and the Women's Field Army in furthering control. There has been a slow but constant growth in this support and recognition of accomplishment, and to headquarters come expressions of appreciation and endorsement of the work which is being done through the cooperation of the hospitals, the Women's Field Army, and the doctors of the state.

PRESIDENT HOWARD: Report of the Committee on the Journal, Dr. J. W. Stovall, Grayson.

REPORT OF COMMITTEE ON JOURNAL

J. W. STOVALL, Grayson: The Kentucky Medical Journal is well made up throughout and in every detail.

It shows on the part of the editors of the Journal, thought, work and ability. It has a large lineage of advertising which surely makes it, if not a profitable enterprise, an enterprise which does not lose money. For advertising, as all of you know, makes any newspaper, magazine, or journal a going concern.

The Kentucky Medical Association may well be proud of its Journal not only from the standpoint of its financial success but from its quality as well and of the high standing it has in the field of medical journalism.

This Journal is well written, sensibly arranged and its all-round good printing makes it the envy of the editors of all professions in Kentucky.

The editorials of the Journal are of such high standard that they deserve particular mention and the recent one concerning our great friend, Arthur Thomas McCormack, is of especial merit.

The scientific articles are always of keen interest to all the members of the Kentucky Medical Society, as they are "up to the minute" in their information and are of such variety as to give one knowledge on the many problems encountered in the everyday practice of medicine.

PRESIDENT HOWARD: Report of the Obstetric Advisory Committee, Alice N. Pickett, Louisville, Chairman.

REPORT OF OBSTETRIC ADVISORY COMMITTEE

ALICE N. PICKETT, Louisville: Mr. President, Dr. Blackerby, Gentlemen of the House of Delegates: I have been asked to give you a report from your Obstetrical Advisory Committee for the State Board of Health. I thought you might be interested to know about the work of Oneida Hospital which was reported to you last year.

During the year, continued improvements have been made in the physical site

of the hospital, one of the most important being the completion of a water system, with the nearby river as a source of supply. A reservoir large enough to hold twenty-one days' supply should tide the institution over in those times of drouth when the river is low.

The personnel consists of:

1. Dr. Henry Caffee, the medical director and obstetrician.
2. A supervising nurse who is an R.N. and graduate of Lobenstine School of Midwifery.
3. Five graduate staff nurses.
4. A dietitian who holds a B.S. degree in home economics from Berea College. She also does simple laboratory work and acts as secretary to Dr. Caffee. Of course, in these times there has been considerable turnover among graduate nurses. It is difficult to keep our staff of six intact. For this reason we have put in two nurses' aides. We hope to add another aide so that we may have one on duty for each of the three eight-hour shifts.

Patients admitted come in largely through references by private physicians and by the county health officers.

The average daily census and the number of deliveries have been increasing since the establishment of the hospital as a maternity hospital. The hospital is better known and is being well accepted by mountain women.

In its first one and one-half years there were 422 admissions, 315 deliveries, 94 perineorrhaphies, 2 cesarean sections, 2 maternal and 11 infant deaths, 11 stillbirths, 6 sets of twins.

A great many pathological conditions have been found, especially rheumatic heart disease (you realize these women have had very limited medical care), kidney disease, toxemias of pregnancy, goiter, deficiency diseases, especially pellagra.

The doctor has done a lot of plastic work up there. So many of these women have previously been delivered by midwives. Many of them come in with third-degree lacerations which they have been carrying for years, and he has been bold enough to do some of those major repairs at the time of delivery because he has been afraid if they get away they will never come back, and will just go the rest of their lives with third-degree lacerations.

There is another thing we thought you might like, and that is the story of the maternity nursing service for home deliveries. This has been functioning in ten counties since 1939. By it the private doctor has been provided with a Public Health nurse to help him in his home deliveries. It has recently become necessary to discontinue this service temporarily in five counties. The budget is still set up in these counties, and the nurses will be employed for this service if and when they become available.

Probably the most interesting thing to all of you will be a little dissertation on emergency maternity relief. The history of this service is as follows:

The appropriations were made by Congress, and the policies controlling its administration were established by law. When certain details do not suit us, it is very well to remember that these things were established by law and that our state administration is pretty much controlled by those national laws. Congress provided for the administration of the funds on a federal level by the Children's Bureau and on a state level by the state departments of health.

Eligibility of the applicants is set by law. We have nothing to do with it.

The financial status of the applicants is also set by law according to their military rank. You might be interested to know how it works. We all pick on Congress, but after all they do have a lot of work to do. Here are these camps; appeals come in by the thousands every day; here are these poor little pregnant girls, many of them away from home for the first time. Something had to be done, and Congress tackled the problem. Well, they wanted all the money that they could appropriate spent for immediate relief; no money, they thought, could be spared for financial investigations, for two reasons: if all these women had been investigated financially there wouldn't have been any money to take care of them after they had got properly investigated, and they didn't have or at least they didn't appropriate the money to cover extra work and extra supplies for the state health departments or even for the state financial departments. For instance, down in Dr. Chenoweth's department of maternal and child health they had to take this burden over, and they didn't even give her extra stamps, much less extra personnel. It has been a terrible burden. More than that, the money is paid through the state finance department, and they are up against the same thing. You send word, "I delivered Mrs. John Jones on this contract and

she has been in and had her sixth week examination. Now please send me $35," and they send you back what amounts to a bill of lading with the date of shipment. I guess some of you have gotten those. I suppose they just sent anything they had. They sent me one check. But Dr. Chenoweth asked me to tell you that they were working on a much simpler form that would make it easier for the men in Frankfort and would make it much easier for the doctors and easier for our Board here.

As to the amount of money to be paid, they decided they would pay us ten dollars for complete prenatal care; they would send us fifteen dollars for delivering the woman; they would send us ten dollars for post partum care. We took it, and most of us are doing that work, are glad to do it for $35, as our contribution to the war, to these men who are doing so much for us. But let me tell you another trouble we had. The doctors wanted payment retroactive for someone they delivered six months ago. Of course, they couldn't do that because they would have been paying for children six months old, so by law there were to be no retroactive payments. If the prenatal work had been done before the application was made, then the patient paid the doctor for the prenatal work. If the delivery was done, it must be reported within twenty-four hours so that the doctor could be paid for the delivery, else we couldn't pay him for it; and so he couldn't be paid for back babies.

When Congress was considering this matter of no financial investigation for the protection of all of us, the protection of the Government and of the individual doctors, this was in their minds: "We are providing a room in a ward, a bed for the patient, the doctor obligates himself to get that patient out of that hospital, especially where they are so crowded, as soon as he possibly can without endangering the woman's health," so they thought that if money meant so much to a woman that she was willing to go to a ward, to get out quickly as her doctor would let her, then to that woman money meant something and such women were the ones they wanted to take care of, and so far as I have been able to find out it has worked pretty well. Of course, nothing works perfectly.

In March and again in July and September, Congress appropriated funds for maternity and sick infant care for the wives and babies of service men in the lowest four pay grades. In April, members of the Council and the Medical Economics Committee of the Kentucky State Medical Association met with a representative of the Children's Bureau, who explained the plan. The plan was adopted unanimously for Kentucky. Again in May, members of the Council and of the Medical Economics Obstetric and Pediatric Advisory Committees met to decide certain questions regarding policies and fees and other details.

It can well be imagined how much confusion characterized the early days of the administration of this program. Fortunately, it is being worked out in a much simpler and more definite way. For example, the doctors are being paid more promptly by the State Treasurer's office in Frankfort; simpler forms are being made for the doctors to fill out reporting their cases.

No money was appropriated for the administration of this service in the state health departments and in the state financial departments. It is all a great burden on the outstanding personnel in the form of extra work and extra supplies, including printed material, stamps, and so forth. Not even stamps have been provided for the clerical work of the offices.

But here is the result, and it certainly has been worth while. Public health agencies, with Congress behind them, take care of the health of the people that is beyond the field of possibility for us as private doctors. The first consideration was actually the saving of the lives of these women and their babies, but there was a thing much more far reaching behind that, and that was the morale of our men in service. A man in North Africa, on Guadalcanal, with his wife pregnant at home and no assurance that she would be taken care of, would not be a man who would stand up very well under the strain of the things he had to go through. If his nation thought no more of his service than to allow that thing to happen, he couldn't be a very good soldier if he didn't feel that that girl was being safeguarded when she really was helpless.

For Kentucky, to October 1, 1943 (that is about four and a half months,) a total of 2,661 applications have been approved; 96 per cent of these have been maternity cases and only 4 per cent pediatric cases; 75 per cent of these deliveries have been

or are to be done in hospitals; 22 per cent have been Louisville cases, and over 550 physicians in this state have been generous enough to participate in this program. Louisville, I think, has done beautifully. The doctors were all confused at first, and a good many men in the beginning said they weren't going to have anything to do with it, but after they found out more about it they have been perfectly splendid in their response to this great need.

D. G. Miller, Jr., Morgantown: I happen to be in one of these counties that do not have any hospitals, and we are twenty-five or thirty miles from a hospital and our deliveries are home deliveries. We feel we should be allowed mileage charge to take care of these patients. In one instance, the taxi fare for a car to drive me from Morgantown to the patient's home and back would have been more than $35 if I got the full fee, and it is not fair to ask us to take our automobiles and make these long trips without some additional payment for mileage. I have talked to a number of men in Western Kentucky and they feel the same way about it.

Secretary Blackerby: For your information and the information of others, while it is not going to cover any taxis for the distance you go, just this last week there has been provided an additional five dollars for the physician, presumably intended to apply for the post-natal service that he gives the patient, making the total now, instead of $35, $40, but there are no provisions and there have been no provisions set up either in the Act or under the regulations that came to us from Washington for traveling.

I think you all will be interested to know that in connection with this particular program the Children's Bureau in Washington over a year ago proposed to a number of states that they would provide a limited amount of money to be used in those states on a program of this kind as a trial of its success. Kentucky declined to accept it. Dr. McCormack was very emphatic in his attitude toward that, but a number of states did accept it, and evidently reported a very satisfactory carrying out of the program. Then Congress appropriated the money to be allocated to the states, and the Chairman of the Advisory Committee of the Indiana State Medical Association said to me this last week that when it came up in the House of Delegates there was something that was just put on your doorstep and you had no other alternative but to administer it. It is one of the heaviest programs that has come up for administration. Dr. Pickett said it came without a single cent allocated to the State Board for its administration. It made it very burdensome on Dr. Chenoweth and her staff to inaugurate the administration of these services. It probably slowed up other services to a considerable extent. She had to make three trips to Chicago and one to Washington in ironing out many of the difficulties in connection with carrying out the regulations and the intent of the law. But before it was inaugurated in Kentucky, as was stated in this report, the Committee on Medical Economics, the Advisory Committee on Obstetrics, and the Advisory Committee on Pediatrics, together with representation from the Council, met on two occasions and approved the plan as it was set up.

As it now stands, there is a total outlay of $40 that will be made available for the total services for these wives of soldiers.

I can very much appreciate, Doctor, the position you take in connection with the need for mileage, but until it has been authorized there is nothing more that I can do.

D. G. Miller: Won't you pay $30 for hospitalization?

Secretary Blackerby: Won't I pay $30 for hospitalization?

D. G. Miller: Yes, sir. Won't you pay $30 for the hospital to take care of the patient?

Secretary Blackerby: The plan as it was set up in Washington to be carried out in the state provided for the hospital fee or for pay on the basis of the per diem cost in the hospital, and it has been required that each hospital provide an annual audit to indicate what the per diem ward costs, not private room costs, or for the maintenance of the patient in that hospital, and that is allowed. There was some confusion in connection with that. At first it got out that it took a certified public accountant. One doctor called me up and said that it would cost him $150. They would have accepted any public auditor, not a certified public accountant, but any public auditor, and later they modified it so that the management of the hospital could make affidavit on a form, filling out the items that are necessary in providing that audit. It can be done on the affidavit of the management of the

hospital without even the expense now of a public auditor, public accountant or certified public accountant.

SMITHFIELD KEFFER, Grayson: I think it is worth $25 to make a trip twenty-five miles, deliver your patient, go back in three or four days, and if you break your car down the man charges you $50 to tow you in.

CARL NORFLEET, Somerset: We have some people down with us who will let you chew it for them if you will. They will take all they can get; they think they are entitled to it. While I don't want to be unpatriotic and we want to do what we can for the soldiers' wives, I think they have a different attitude about what the intent of this appropriation is. I don't know how that is going to be corrected. There are many of those cases that can't supply transportation, they can't come and get you and bring you back; it is up to you to get to them if you possibly can.

Another question I want to ask Dr. Blackerby. Is it true that a certain amount is set aside in these cases for paying an assistant in a complicated case?

SECRETARY BLACKERBY: For any consultation it provides for a fee of $35 for major operative service in connection with it; for minor operative service, for instance the lancing of an abscess of the breast, or something of that kind, a fee of $10. There is no provision for a consultant. There is a provision for nurses in complicated cases.

CARL NORFLEET: A doctor called to a case and finding it a forceps case has to have someone to assist him. Could he be termed, then, a consultant?

SECRETARY BLACKERBY: The doctor who is going to perform the services is the consultant. The doctor gets his fee who has the case just the same. There you have the two doctors, the doctor getting his routine fee, and his consultant.

CARL NORFLEET: How much will the consultant get?

SERETARY BLACKERBY: Thirty-five dollars if it is a major operation; $10 if it is a minor operation, and they had a fee of $5 for anesthetic. That has been changed so that it will provide for a maximum of $10. Presumably it is intended to apply as the prevailing charge for anesthetic, not to exceed $10.00.

G. D. MILLER: What about the physician who does his own forceps delivery, episiotomy, and furnishes his own anesthetic?

SECRETARY BLACKERBY: That is assumed to be services without compensation. You can understand that this is a very difficult program to administer. Your State Health Department has the responsibility of administering it in keeping with the provisions of the Act and the regulations. We are trying our level best to play the game with the doctors the best we possibly can, but we are laying down the principles that were laid down for us in connection with the Act. We wish we could make it more liberal within our own authority.

GANT GAITHER, Hopkinsville: I would like to corroborate this gentleman's statement. We have a distinguished obstetrician, Dr. Frank Bassett, than whom there is no more delightful person in the world, and he has been in the habit of going out to see a great many of these people, and he tells the story, and I am sure it is true, that he went out and delivered a patient and was paid nothing, and coming back he got stuck in the mudhole in his automobile, and the father of the child brought out a pair of mules and pulled him out. When he got through Bassett said "How much do I owe you?" and he said, "Ten dollars," and Dr. Bassett paid him the ten dollars and came on in. That is some of the psychology of a great many of these people.

Dr. Blackerby, what I really rose for was to ask a question. I do not do obstetrics and don't do anything but surgical work, and since the war has been on I have made it a practice to make no charge for any surgical services rendered to anyone whose husband or father is in the service. I haven't made any charge at all for ordinary abdominal surgery or any other sort of surgery which I may do for anyone who is in active service. I also have been doing the surgical work in the Hopkins County Hospital, and for certain members of the profession there who formerly employed Dr. Forshay, who is now in the service as a Major, I do their surgery and put the surgical fee to the credit of Dr. Forshay, which I think is something to help the war effort a bit. Day before yesterday, Dr. Strother, who is one of Dr. Forshay's friends, had the wife of one of the privates who is away to be delivered. It was the first case of the kind I had had. He thought it was necessary to do a cesarean section, which we did. Now, will that fee, if I can collect that, which I would then give to Dr. Forshay, be available? Will there be a surgical fee avail-

able for having done a cesarean section on this patient?

SECRETARY BLACKERBY: There will be a $35 fee. The only thing I can say was brought out by Dr. Pickett. There are certain regulations that have to be carried out.

GANT GAITHER: I am not argumentative; I just want to be informed.

SECRETARY BLACKERBY: I know you are not. If the Doctor who employed you as a consultant puts you on record as having performed the operation with Dr. Chenoweth's division here, you will be entitled to the fee. It is simply a matter that we have got to account for the expenditure of every cent of this money and we do have to have the records in the accounting of it. Therefore, the plan requires that each doctor is employed, or each hospital, and the application must be made for the approval of the money for payment.

PRESIDENT HOWARD: There are a number of reports remaining and doctors here are prepared to give them. I believe we ought to move along. Is there anything further on this subject now? What is your pleasure?

W. B. ATKINSON, Campbellsville: I would move its adoption.

The motion was seconded and carried.

PRESIDENT HOWARD: We will now have the report of the Pediatric Advisory Committee by Dr. James H. Pritchett, Louisville, Chairman.

REPORT OF PEDIATRIC ADVISORY COMMITTEE

JAMES H. PRITCHETT, Louisville: Before making this brief report I want to take the opportunity to compliment Dr. Philip Barbour and his staff for the wonderful services they have rendered the state in the last year. I am amazed but not surprised at the scope of their work.

The Advisory Committee on Pediatrics to the Division of Maternal and Child Health reports that there has been a continued effort during the year to carry out the policy of holding clinics and conferences on child health throughout the state. Such clinics and conferences were held in McCreary and Estill Counties, Harlan, Hyden, Oneida, Corbin. Pediatric clinics were also held at Benton, Murray, Hazel, Paducah, Hickman, Cadiz, Williamsburg, Somerset, West Point, Columbia, Cecilia, Elizabethtown, Shepherdsville, Carrollton, Taylorsville, Brookfield, Lebanon Junction.

The pediatrician again during the past year made medical examinations and gave advice on needed medication and nutrition of the children in the clinics held by the Crippled Children Commission. The pediatrician attended crippled children clinics at Harlan, Mt. Sterling, London, Corbin, Barbourville, Williamsburg, Paducah, Mayfield, Benton, Murray, Shelbyville, Carrollton, Bedford, Morehead. LaGrange, Taylorsville, Shepherdsville, Owensboro, Central City, Covington, Pineville, Paducah, New Castle, Hazard, Whitesburg, Springfield, Frenchburg, West Liberty, Irvine, Bowling Green, Somerset, Quicksand, and Mt. Sterling.

The pediatrician held a series of conferences with the Superintendent of Public Instruction on nutrition in the schools and the setting up of school lunches in the schools throughout the state. He is also a member of the State Nutrition Committee, which is active in promoting improved nutrition of the children in the state.

James H. Pritchett, M. D., Chairman

Mr. President, I recommend the adoption of this report.

The motion was seconded and carried.

PRESIDENT HOWARD: Next is the report of the Syphilis Control Advisory Committee, W. U. Rutledge, Louisville, Chairman. (Not present.)

Next is the report of the Committee on Periodic Health Examination, W. E. Doyle, Louisville, Chairman.

REPORT OF COMMITTEE ON PERIODIC HEALTH EXAMINATION

W. E. DOYLE, Louisville: The responsibility for the control of health within the community lies almost entirely with the physician. Inasmuch as the nation is engaged in allout production of the essentials of warfare, there has been a migration of practically all workers to industry or agriculture or mining. Of the 53 million employables in this country, 95 per cent are engaged in essential war production within industrial establishments.

The committee, therefore, feels that it is apropos at this time to direct this report to that phase of physical examination as applied to the industrial worker.

Physical examinations are mainly of two types, preplacement and periodic. Each type is necessary and each serves a definite purpose in the industrial health program. The first is in more common use and is usually designed for the following purposes:

(a) To protect the plant family against the introduction of contagious diseases and unfavorable consequences.

(b) To protect the company against employment of ill or physically handicapped workmen who might be a menace to themselves or fellow-workmen.

(c) To protect the company against compensation claims for injury or occupational disease contracted prior to employment.

(d) To place prospective employees in adaptable positions that will promote production, coordination, and above all safety.

(e) To detect remediable defects with a view to correcting them by collaboration of the physician and superintendent in matters of rehabilitation, thereby stimulating better health.

(f) To discover incidence of chronic ill health in the interest of reduction of absenteeism.

(g) To elicit a history which might indicate that the prospective employee is "accident-prone."

Most industrial organizations prefer to employ a force having the highest physical and mental attainments. This is scarcely possible at all times, particularly in times of labor shortage. Often men of inferior physique have special training and ability and are desirable employees in spite of physical handicaps. It is to the employer's advantage to see to it that this type of workman is properly placed and his health properly corrected and maintained.

Periodic or routine examinations of employees are justified for the following reasons:

(a) To determine new developments in the physical condition of employees previously examined.

(b) As a check on results of rehabilitation, medication and treatments carried on since last examination in order to change the program, if necessary.

(c) To uncover causes of chronic absenteeism.

(d) To inform the employer as to where and when occupational environment is injurious to workers' health, so that measures may be undertaken to correct or control them.

(e) To detect new cases of communicable diseases developed since last examination, such as tuberculosis, syphilis, etc.

(f) To detect mental and physical handicaps resulting in accidents, damaged goods, tools, etc.

(g) To promote happy, satisfied employees by closer relations and satisfaction in the thought that their bodies are in a sound physical condition. It gives them an incentive to produce and to work in harmony. The frequency of periodic examinations is variable in industries promoting such programs. A majority will find that the annual examination will suffice. Others may find it advisable to adopt monthly, quarterly or semi-annual physical checks on its employees where known occupational exposures to hazardous processes or materials exist.

Little is to be expected of any type of physical examination unless the program employing it be broad enough to utilize the full information which is revealed by individual and mass physical data. Each case must be followed up to see to it that the unfit institute remedial measures. A broad and continuous educational program must accompany the examination program, both to insure its completion and to obviate labor unrest, as it may seem to some workers to be a useless and unnecessary routine practice.

To obtain practical results, good records must be kept of all phases of all examinations so that measurable and comparable results may show exactly what is being accomplished and also to point out where additional support must be emphasized.

Physician-patient relations must be maintained at all times. The conditions found upon examination must be considered confidential communication.

The employer must be told when and where physical examination reveals evidence of pathology due to exposure to poisonous substances within his plant. Injuries sustained during working hours must be brought to the immediate attention of the departmental head so that a study of the events surrounding the incident can be studied and action taken to prevent its occurrence.

The employee must be told what is wrong with him, what he must do to correct it, and how important it is that treatments must begin at once. The employee must be convinced that the object of the examination is to improve his health in order to become a better workman and not that he will be discharged if found physically unsound. Some conditions naturally will be found upon individual examination which will require the worker to be removed temporarily from employment. Among these may be mentioned active tuberculosis and infectious

syphilis. These workers must be assured that upon return to normal health their jobs will be returned to them.

The facilities for physical examination of employees offered by the plant should be available and used by the entire plant personnel. The head of the firm, office force, foreman and supervisors, in addition to receiving valuable health data, can set a fine example to the other employees by availing themselves of periodic checks on their physical conditions. They should see to it that advice and recommendations are followed religiously. Plant employees will have much more faith in the program if they know that the "front office" has belief in it and uses it regularly.

W. E. Doyle, Chairman
Benjamin L. Brock
O. P. Chapman

PRESIDENT HOWARD: You have heard Dr. Doyle's report. What is your pleasure?

GANT GAITHER, Hopkinsville: I move its adoption, Mr. President.

The motion was seconded and carried.

PRESIDENT HOWARD: The next report is that of the Committee on Public Relations, Dr. Irvin Abell, Louisville, Chairman.

REPORT OF COMMITTEE ON PUBLIC RELATIONS

IRVIN ABELL, Louisville: In 1941, the Kentucky State Medical Association, through its House of Delegates, adopted a report of the Committee on Hospital Standardization which included a recommendation "that legislation be enacted that will set up a minimal standard of requirements to operate a hospital." A bill designed to meet this purpose was presented to the General Assembly in 1942, but either through organized opposition or through misunderstanding, failed of passage. This committee, in its report made to the House of Delegates in 1942, stated that the bill would again be presented to the General Assembly in 1944, and expressed the belief that misunderstanding among members of the profession and hospital administrators would in the meantime be cleared up.

The committee is aware of the fact that a large number of hospitals in the state already meet the minimal requirements as provided for in the bill, and has every confidence that doctors connected, administratively or otherwise, with hospitals that need some essential improvements to qualify, will, on serious reflection, agree to a plan for uniformity of minimal standards. We see the pattern of social economics changing practically every year, and, along with these changes, plans develop for more adequate medical care and hospitalization. Government subsidies, such as are illustrated in the emergency maternity and infancy care program for soldiers' wives and infants provided for by the last Congress, are sure to affect, either directly or indirectly, every hospital in the country. In the administration of these public funds, certain minimal requirements are laid down. It is highly probable that benefits for soldiers and their families after the war will be provided by both Federal and state legislation, which will further create a demand for hospital services of a type based on reasonably good standards. This committee, therefore, would recommend that the influence of the members of this Association be made vocal in an effort to secure the passage of this much needed bill.

We would also remind the House of Delegates that, at its session in 1941, a very exhaustive report on the need for additional hospital facilities for the care and treatment of sufferers from tuberculosis in the state was made by your Committee on Medical Economics, and definite proposals growing out of the report were made to the Legislative Council, wherein more adequate appropriations were sought. The 1942 General Assembly failed to provide directly for any tuberculosis hospital building program, but the granting of the authority to the Governor to make allocations from his emergency fund for state institutions has resulted in approximately three-fourths of a million dollars being made available for additions to the State Tuberculosis Hospital, which will provide, for white and colored patients, about 230 new beds. Your committee, while believing that this action by our present administration should be acclaimed by the profession, must, at the same time, call attention to the fact that a hospital of more than 300 beds will require adequate state appropriations if it is to serve the purpose for which it is constructed. We are reminded that in the past this hospital has been operated on a part-pay, part free basis because of lack of public funds, and that many worthy patients have been necessarily denied any opportunity for hospitalization. It is apparent that there is an aroused public sentiment in favor of increased appropria-

tions for care of those afflicted with tuberculosis, and, here again, we believe the profession should be aggressively active in urging that adequate funds be provided by our next General Assembly.

For approximately half a century there has been a constitutional limit on the salaries of all public officials, except the Governor, in Kentucky. In 1925, a constitutional amendment failed by less than four thousand votes to remove this limitation. This fall it will be voted on again, and your committee, in keeping with the action of the Council at its last meeting, is of the opinion that the Association should add its endorsement and urge a favorable vote by the electorate to remove this restriction and permit the General Assembly to fix salary limits for elective and statutory officials. The Efficiency Commission in 1924 said in its exhaustive report: "The arbitrary limit of $5,000 for all salaries prevents the employment of men of the highest caliber in the posts of greatest responsibility in the state service." Colleges, courts, boards of education, and other state and local agencies have from time to time lost men of exceptional talent because of this restriction. It has been stated that Kentucky is one of only four states with any such limitation in its organic law. Many state and civic organizations have gone on record already in expressing the need for the passage of this amendment.

Aware of the furor created by the introduction of a bill in Congress known as the Wagner-Murray-Dingell Bill, which purports to create a unified national social insurance system, your committee, recognizing the possibility of consideration of and action on the bill during this session of Congress, believes the House of Delegates should set aside a special hour for discussion of the bill as it affects medical and hospital service benefits. The Journal of the American Medical Association and constituent association journals have given much space to an analysis of this proposed legislation, and we assume that the delegates and members are familiar with its provisions.

We simply wish to incorporate in this report the action of the House of Delegates of the American Medical Association at a special session in 1935, at a time when similar social security legislation was proposed. Its report included the following significant language:

"The primary considerations of the physicians constituting the American Medical Association are the welfare of the people, the preservation of their health and their care in sickness, the advancement of medical science, the improvement of medical care, and the provision of adequate medical service to all the people. These physicians are the only body in the United States qualified by experience and training to guide and suitably control plans for the provision of medical care. The fact that the quality of medical service to the people of the United States today is better than that of any other country in the world is evidence of the extent to which the American medical profession has fulfilled its obligations.

The House of Delegates of the American Medical Association reaffirms its opposition to all forms of compulsory sickness insurance whether administered by the Federal Government, the governments of the individual states, or by any individual industry, community or similar body. It reaffirms, also, its encouragement to local medical organizations to establish plans for the provision of adequate medical service for all of the people, adjusted to present economic conditions, by voluntary budgeting to meet the costs of illness.

The medical profession has given of its utmost to the American people, not only in this, but in every previous emergency. It has never required compulsion, but has always volunteered its services in anticipation of their need.

The committee has studied this matter from a broad standpoint, considering many plans submitted by the Bureau of Medical Economics as well as those conveyed in resolution from the floor of the House of Delegates. It reiterates the fact that there is no model plan which is a cure-all for the social ills any more than there is a panacea for the physical ills that affect mankind. There are now more than 150 plans for medical service undergoing study and trial in various communities in the United States." That was in 1935. There are now more than 300. "Your Bureau of Medical Economics has studied these plans and is now ready and willing to advise medical societies in the creation and operation of such plans. The plans developed by the Bureau of Medical Economics will serve the people of the community in the prevention of diseases, the maintenance of health, and with curative care in illness. They must at the same time meet apparent economic factors and protect the pub-

lic welfare by safeguarding to the medical profession the functions of control of medical standards and the continued advancement of medical educational requirements. They must not destroy that initiative which is vital to the highest type of medical service.

Your Reference Committee, believing that regimentation of the medical profession and lay control of medical practice will be fatal to medical progress and inevitably lower the quality of medical service now available to the American people, condemns unreservedly all propaganda, legislation or political manipulation leading to these ends."

The members of this committee would recommend that this action by the House of Delegates of the American Medical Association be accepted as a charter for guidance in any discussion of the pending legislation.

We believe there is a definite need for more adequate funds, administered on a local level, to finance the cost of medical and hospital care for the indigent, and to provide some subsidy to insure adequate medical services for those in the lower economic brackets, and to this end would see no objection to grants-in-aid to the states by the Federal Government.

In the rehabilitation period following this war, our profession will have to play a large part and its members should be thinking constructively in regard to plans for the improvement of existing facilities and the expansion of medical care to make them adequate to meet conditions that will result from demobilization of manpower from the armed forces, from industry and from other sources. This, with new adjustments and a changing economy, will result in disturbed individual and family relationships. The doctor therefore will again have to combine art with his science and travel the way of the old family doctor.

The profession has for more than half a century sponsored legislation affecting the practice of medicine and the public health in Kentucky. Successive General Assemblies have given recognition of this principle by continuing to maintain and provide laws giving responsibility to the State Association for the selection of administrative leadership in these fields. Over this long period, we have commanded the confidence of the people, and therefore should not lose sight of the fact that we must hold inviolate this public trust. Our interest in the success of health programs carried on both a state and local level must not lag; our responsibility for cooperating with the State Board of Health in the enforcement of the Medical Practice Act is a continuing one. Any new legislation that may be proposed and which affects health and welfare should engage our individual and collective attention, to the end that we may give guidance to our representatives in the General Assembly. Having reposed confidence in our leadership during all the years, we can reliably anticipate a respectful hearing from the members of this law-making body. Your committee would recommend that the members of the Association be kept informed, through the columns of the Journal, of any important impending legislation.

Respectfully submitted,
E. B. Bradley, Lexington
C. C. Howard, Glasgow
W. E. Gary, Hopkinsville
E. M. Howard, Harlan
P. E. Blackerby, Louisville
Irvin Abell, Louisville, Chairman

PRESIDENT HOWARD: You have heard the report of Dr. Abell.

J. W. SCOTT: I move it be accepted.

The motion was seconded.

GANT GAITHER, Hopkinsville: Do we have a discussion on this? There was a request in Dr. Abell's report that some hour be fixed for general discussion on this bill.

PRESIDENT HOWARD: All in favor of the motion make it known by saying "aye"; opposed by the same sign. The motion is carried.

SECRETARY BLACKERBY: I think, Mr. President, that after dinner this evening you will want to have the House of Delegates in session immediately following for cleaning up all business in anticipation of the meeting on Wednesday morning for the election of officers so there will be no necessity of prolonging that morning's meeting. In that connection, if there are any resolutions they should be given to the Committee on Resolutions, of which Dr. Reynolds is the Chairman. If there is any miscellaneous business that anyone wants brought to the attention of the House of Delegates, that should be called to the attention of Dr. Pulskamp. He asked me not long ago what the Committee on Miscellaneous Business was supposed to do, and I told him it wasn't supposed to do anything unless somebody wanted something additional

to what came through the reports of the committees presented to the House of Delegates, so he is available for any additional business.

J. W. Scott: May I ask if a new resolution would come under new business? I presume that should be presented in advance to the Committee on Resolutions before it has been presented to the House. The resolution has been handed to me with the request that I introduce it, and I want to know what to do.

Secretary Blackerby: I have also a resolution and I was going to present it to the Resolutions Committee with the idea of their bringing it before the House of Delegates tomorrow.

J. W. Scott: It doesn't have to be presented in the House first?

Secretary Blackerby: You may, and have it referred, but they would bring it right back again. It is my understanding that any resolutions that were drawn will be presented by the Resolutions Committee and anyone who has a resolution to present would present it through that committee. You are a good deal more familiar with the formalities and proceedings than I am because you have been at it longer.

President Howard: Dr. Blackerby, at the Wednesday morning meeting, after the election of officers, so far as I know, just before final adjournment, under unfinished business, would that be the proper time to have the discussion of Dr. Abell's report?

Secretary Blackerby: If discussion on that once starts it may mean a good deal of discussion. It would seem to me that you could get through with it at the meeting tonight. The consensus of the delegates was to have the discussion following the dinner on Monday evening.

President Howard: I don't know of anything that this House of Delegates and Council have of more importance to come before them than the discussion of Dr. Abell's report, and with that end in view we certainly want to have as good a crowd as possible present, a representative body to discuss this matter, because it is bearing down on us, I think. It is just in the offing. I hope that we can have time to do it.

J. W. Scott: You will have the biggest crowd at your dinner.

President Howard: I hope so.

Next is the report of the Committee on Industrial Health, Dr. Shirey, Louisville. Chairman.

Report of Committee on Industrial Health

W. E. Doyle, Louisville: Dr. Shirey is not here. He has asked me to say that he has no report. However, there is a matter which I think comes within the province of this committee. Dr. Blackerby is in receipt of this letter from Dr. Peterson, Secretary of the Council on Industrial Health of the A.M.A. I shall read it.

"Would it not be an excellent idea to use the present opportunity to get state workmen's compensation administrators and insurance carriers to do something about reducing the length and complexity of industrial accident and occupational disease report forms? Now that the profession is so overworked in every way, this matter can be presented as a project of real urgency. If successful, I am sure the rank and file of the profession will be eternally grateful.

No standard form can be suggested from this office because of variation in state requirements, but in general the effect should be to agree upon what medical information is absolutely essential and to propose revisions or modifications on that ground.

Very truly yours,
C. M. Peterson, M. D., Secretary
Council on Industrial Health"

Secretary Blackerby: I think we can explain very briefly that that is simply to simplify records, and every doctor in the United States would agree to that. Because I am going to reply to this, I would like to be able to say to Dr. Peterson of the American Medical Association that it is the sense of the House of Delegates that any improvement in the records that will reduce the volume of it would be welcomed by the profession in Kentucky.

President Howard: Dr. Doyle, do you think that would cover it?

W. E. Doyle: I should think so. Perhaps Dr. Peterson has in mind more concrete work or more explicit recommendations. The mere endorsing of it may be sufficient.

J. A. Orr, Paris: I move we approve any plan that Dr. Peterson's committee will provide that will simplify the forms necessary in this compensation program.

The motion was seconded and carried

President Howard: We will have the report of the Committee on the McDowell Memorial, Irvin Abell.

Report of Committee on McDowell Memorial

Irvin Abell, Louisville: Owing to the

wartime restrictions which greatly diminish travel, the number of visitors at the McDowell Memorial has decreased, thereby materially reducing the income heretofore derived from this source. While the custodian, Mrs. W. W. Johnson, has been quite efficient in her care of the house, the ravages of time have taken their toll. The outside woodwork needs painting badly and the floors show wear and tear to the extent that they should be done over. The inside wall paint is cracking and should be replaced. The composition shingles on the roof of the porch have buckled and cracked, leaving leaks to rot the sheeting and roof timbers. These reparis are badly needed and should be made to prevent further damage and deterioration. There are no fly screens at the windows and doors, and the windows have no curtains; screens and venetian blinds would not only contribute to the comfort of those visiting the house, but add substantially to its appearance.

The home has very little furniture, one of the rooms being quite bare. Several public-spirited citizens of Danville have loaned antique furniture which greatly improves the atmosphere of the home and for which the committee wishes to extend its thanks and appreciation. The kitchen is well fitted with a full complement of the furniture of that period, including the fireplace with spits, oven, pots, piggins, and a home-made meat grinder given by Mr. Darbishire, a decendant of Dr. McDowell. The committee desires to express its thanks to Mrs. Madison Lee, who has made the garden and yard a real beauty spot.

Mrs. August Schachner has graciously and generously donated 1250 unbound volumes of Dr. Schachner's book "Ephraim McDowell, Father of Ovariotomy." The custodian states that she could have sold some of these unbound volumes to visitors at one dollar each but has no authority to do so. Your committee recommends that a number of these be provided with suitable bindings and that they be offered for sale at a price that will provide an additional income.

The Kentucky State Medical Association took no little pride in erecting one of the four national shrines devoted to members of our profession; it should feel it an obligation to keep this shrine in a condition befitting the pioneer it memorializes.

At the 1941 meeting of the State Medical Association the House of Delegates voted to absorb a then deficit of $1944.31 and to defray in the future such expense as may be necessarily incurred. Your committee recommends that the Kentucky State Medical Association confer with the Custodian of State Parks with a view to making the needed repairs and improvements.

Committee:
Emil Novak
C. A. Vance
J. Rice Cowan
John H. Blackburn
J. Gant Gaither
Irvin Abell, Chairman.

LILLIAN SOUTH, Louisville: I would like to call Dr. Abell's attention to the fact that the House of Delegates passed a resolution that no furniture or anything could go into the McDowell home except that it was the property of the McDowells. Perhaps that is why some of the place is bare. I took quite an active part in locating several pieces of furniture that did belong to Dr. McDowell, but the people who owned then wanted such a high price for them that we couldn't buy a great many of them. At the Paducah meeting we had several photographs given us, one of Dr. Sawyer who was supposed to cure cholera, and the donors wanted that in the McDowell home and the House of Delegates made that motion then.

PRESIDENT HOWARD: Gentlemen, you have heard the report and the recommendations contained in it.

J. W. SCOTT: I would like to ask Dr. Abell what he would suggest as the beginning point? What would be the most likely source?

IRVIN ABELL: The repairs that are needed, and the painting and the roof and the flooring, would not be such an expensive thing, and I personally think the Association should bear them.

J. W. SCOTT: I move that the Association supply the funds for keeping the house in proper repair, assuming that they are available.

The motion was seconded and carried.

PRESIDENT HOWARD: Dr. Abell's report, however, suggests that we confer and see what is needed.

J. A. ORR: The report of the committee doesn't comply with the very formal resolutions of the House of Delegates, and it seems to me they should be changed. If we can't get furniture of that period, it seems to me we ought to remove that obstacle so the house can be furnished.

C. A. VANCE, Lexington: Mr. Chairman, that motion was passed, all right, but it hasn't been complied with. I know the office chair of Crawford Long is in the house, and it was presented by Dr. Charles Venable, of San Antonio, Texas, and he gave it to us to use for the McDowell home, and we accepted it, so it has been broken that one time anyway.

J. W. SCOTT: I think we ought to maintain the dignity of the house and that we ought not to let anything lead us to lower the standard of the equipment in the house. For my part, I would rather see the house closed and dismantled and abandoned than to see a hodge-podge of things in there which don't meet the standards of taste.

J. A. ORR: I move that the committee be authorized to accept any type of furniture or draperies or blinds that they may deem fit for the house; that the former action of the House of Delegates be rescinded.

C. A. VANCE: I second the motion.

PRESIDENT HOWARD: The motion is restored by second of Dr. Vance. All in favor of the motion say "aye"; and opposition let it be known by saying "aye".

PRESIDENT HOWARD: The motion is carried. It is in the discretion of the committee, and that is your committee, Dr. Abell.

SECRETARY BLACKERBY: May I remind you that Dr. Blackburn is here, and I am sure he is prepared to make his report for the Committee on Report of the Council.

PRESIDENT HOWARD: We will have that report.

REPORT OF COMMITTEE ON REPORT OF THE COUNCIL

J. H. BLACKBURN: Our Council this year in their report has had two rather unusual features; first, the death of our President-Elect, Doctor C. C. Turner, and second, the death of our Secretary, Doctor Arthur Thomas McCormack, both of whom had passed away rather suddenly while on active duty for our Association.

The Council has called attention to our past Secretary, Dr. McCormack, and recommends that one issue of the JOURNAL sometime during the coming year be set aside as a memorial tribute to Doctor McCormack, which fact we are sure will receive the unanimous vote of the House of Delegates.

The Council also recommends that the State Board of Health provide in the dedication of the new annex to the State Board Building that it be a memorial to Dr. Arthur Thomas McCormack and that the State Association provide a memorial plaque in this building corresponding to that in the main building in memory of the late Dr. J. N. McCormack.

It was further voted by the Council that the Governor of Kentucky name the new State Tuberculosis Sanatorium Addition as the "Arthur Thomas McCormack Memorial Sanatorium." We are sure that all of these recommendations will receive the full vote of the House of Delegates.

The Council commented upon the necessity for having some one to carry on the work for the remainder of the year and by a full vote of the Council Doctor P. E. Blackerby was appointed Acting Secretary and Editor to serve until the next meeting of the House of Delegates, which we are sure will meet with the approval of the House of Delegates.

The report of the Council goes rather fully into the place taken by Kentucky physicians and the Council of the Kentucky State Medical Society in providing for the number of physicians required by the National Procurement and Assignment Committee. We are sure that all of the physicians of Kentucky and the House of Delegates will commend the Council for their part in making these provisions, and further commend the physicians of Kentucky for their acceptance of the duties imposed upon them by the National Committee.

The report of the Council goes rather fully into the matter of the discontinuance of the Women's Auxiliary Supplement and provisions of the reserve "not to exceed $200.00" for carrying on the work of the Auxiliary. They also considered rather in detail the matter of the Committee on Public Relations and appropriation not to exceed $750.00 for the carrying out of the Committee's work.

The report goes rather fully into the work of the JOURNAL and also the auditor's report for the year 1943. It was shown that "the sum total of the increase in advertising and the saving effected in the cost of printing is $1283.83." Thus, when we deduct from this saving the loss in membership dues we have $233.83 over, as compared with the previous year.

The report of the Council goes rather fully into the matter of membership, showing that we had a loss in 1943 of 10.8% of our 1940 members in counties with cities of the first and second class.

In counties other than those with cities of the first and second class there was a percentage loss of 9.7%, which losses compared with each other indicate a rather uniform distribution of memberships throughout the State.

The report of the Council further mentions the reapportionment of State Delegates to the A.M.A. and our consequent reduction from three to two delegates from Kentucky.

The Council has gone rather completely into the matter of the urgency for meetings of County and District Medical Societies, recognizing the fact that the physicians at home are practically all over-worked and have little time for meetings. They further remind us of the relationship existing between the different societies and the fact that all who may apply for reciprocity and find their attendance on County and State Societies will be decidedly helpful in securing this reciprocity. They further remind us of the advantages secured by members in good standing in the Society in case any mal-practice suit should arise. They further call attention to the fact that there is impending the possibility, or may we say probability, of legislation by our Congress which "may affect in a very vital sense whether our profession is to have continued freedom of action, in response to freedom of choice on the part of the people, for the scientific services our doctors have been trained to give."

We feel sure that all of these various topics commented upon by our Council in their report, and in many instances recommendations made, will meet with the complete approval of the profession at large and with the House of Delegates in particular.

PRESIDENT HOWARD: You have heard the report of Dr. Blackburn. What is your pleasure?

GANT GAITHER, Hopkinsville: I move it be adopted.

The motion was seconded.

SMITHFIELD KEFFER, Grayson: I think as much of Dr. McCormack as any other man in the state. I also remember his father. I think he was the greatest organizer that the medical profession ever owned. Would you gentlemen object to changing that second name and having it the McCormack Memorial Institution for the Tuberculous and have the Arthur T. McCormack one for the health program? I think that would be nice. Let the Third Street building be the Dr. Arthur McCormack Memorial, and the tuberculosis sanatorium be just the McCormack Memorial Institution and say that it is in honor of both of them. I think that Dr. J. N. McCormack did more to give us an organized medical profession than any member we have ever had. He started that and he deserves some credit for raising such a man as he raised.

J. W. SCOTT: I have a feeling that you honor a man more with one thing than you do if you scatter it around and name this for him and that for him and that for him. My entire purpose in this is to honor Arthur McCormack, but I do feel that there is a good deal to be said for honoring a man with one act rather than honoring him by memorializing this, that and the other. It seems to me that is something to be thought of.

SECRETARY BLACKERBY: Dr. Scott, if I may answer that, the Council, in connection with memorials, went on record as recommending that the sanitarium be called the Arthur McCormack Memorial Sanitarium and made no recommendation at all for providing anything in connection with that as far as the cost to the Association is concerned, but did recommend that a plaque be provided in the new wing of the State Board of Health Building. Dr. McCormack had given so much of his time and effort in getting the new wing there that in recognition of his efforts they recommended that in the building which is the headquarters of the Association, that plaque be placed, simply as the plaque was placed in the main building for his father.

The Council, if I may advise you, anticipated action by the administration in Kentucky in the matter of Hazelwood, and I think, without making any further comment, that we can anticipate that tomorrow night probably the Governor will have something to say about the institution out there. After all, it is a state-owned institution and he will assume whatever prerogative from his own position he deems proper. I can't say what he means to do, but he may make reference to it.

C. A. VANCE: The report just recommended the name.

SECRETARY BLACKERBY: That is right, and the Council did not obligate the Association in any sense at all in the State Tuberculosis Sanitarium.

PRESIDENT HOWARD: Are you ready for

the vote on the motion to adopt the report? All in favor let it be known by saying "aye"; those in opposition by the same sign. It is carried.

This concludes our reports except those who were absent at the time their names were called to make reports. I wonder if any of the doctors are here who were to report.

SECRETARY BLACKERBY: Dr. Pulskamp asked that we report progress for the Committee on Miscellaneous Business. I believe Dr. Reynolds is here. Dr. Reynolds, three resolutions were handed to your committee.

REPORT OF COMMITTEE ON RESOLUTIONS

H. G. REYNOLDS, Paducah: When I was appointed Chairman of this Committee on Resolutions, my understanding of my duties and the function of this committee was so vague that I wrote Dr. Blackerby and asked him what the committee should do, and after citing the past history of this committee and what it had done in reporting to the House of Delegates, he stated finally, "I gather from the above that the Committee on Resolutions simply reports progress the first day." Of course, being newly appointed as chairman of that committee, there hasn't been any progress. "The session then during the meeting acts only on matters that are referred. In order to make a full report on the last day of the meeting of the House of Delegates, any matters referred to the committee may be considered and the action of the committee for recommendation or disapproval then reported back to the House of Delegates."

I had nothing to report, and I consulted with one of the other members of the committee and he had nothing to report, so I judge that I am here to sit around and listen and to accept any suggestions of the Delegates.

SECRETARY BLACKERBY: Dr. Reynolds, Dr. Scott from Lexington said he would have a resolution to hand to the committee that it can report at the night session after the dinner, and I have a resolution. Then there may be a resolution growing out of a part of a report of Dr. Abell which was read this afternoon. By reporting progress you are reporting all you can.

PRESIDENT HOWARD: Gentlemen, at the end of these reports there is a little matter that says New Business. Is there any new business to come before this House of Delegates at this time?

CHARLES F. WOOD, Louisville: I would like to bring up a matter which I would not like voted on at the present time; I don't think there is enough of the membership here to do it, but that is the question of the Society maintaining the dues of its active members who are in the military service at least for one year. Our Treasurer has reported a fairly adequate surplus in the treasury, and unless there is some constitutional irregularity prohibiting such a move, I would like to see the Society at least financially support all of its members in military service as long as we are financially able to do so. As I say, I think that is a matter that should be voted on by a larger attendance than we have, but at least I would like it in the record for consideration either tonight or Wednesday morning.

PRESIDENT HOWARD: If you will pardon the Chair for saying something, this matter has been mentioned a time or two here and I think something should be done about it. I have just found out from Dr. Blackerby, and I think that was discussed at our last Council meeting, Dr. Vance, that according to our By-laws the State Medical Association of Kentucky cannot waive or suspend or accept those members without somebody paying for them. In the case of Fayette County and Christian County and some of the other counties, the county has elected to pay the dues of their members who are in the armed services. Recommending this to the various counties is one thing, and getting it done is another, and I will tell you why. I have given this some thought. In a county where there are two or three or four doctors and half of them are gone, that doubles the dues of each one of those members if they absorb it, and in the case of Fayette County where you have 120 or 130 doctors and some 30-odd out, there is still room to absorb it. In our county we could easily absorb it; we have about 12 or 13 doctors in the armed services, out of about 40 or 50 doctors. In the smaller counties, and they are small for various reasons, you see how that would work; if there are two doctors and one goes, the man who is left has to pay double dues. If there are four doctors and two go, the two left would pay double dues.

That being the case, I think we should consider seriously the matter of changing our By-laws, if necessary, so that our State Association could absorb the state part of it and then let the county probably absorb the county part of it, or let the state absorb it all.

I am not necessarily saying that is the thing to do, but if it were left to me personally I believe that is what I would do. I think we should give it serious consideration and think it over and decide something about it at our next meeting.

C. A. VANCE: I'd like for Dr. Blackerby to read the By-law. According to that we haven't any choice in the matter at all; we have got to do it the way it is in the By-laws.

PRESIDENT HOWARD: In the event the By-laws forbid it, can't we change the By-laws?

J. A. ORR: It would take a year to change the By-laws.

PRESIDENT HOWARD: I don't think it is necessary to read it. If you have heard it and know it, it is just taking up more time.

J. A. ORR: I think it would be worth while, Mr. Chairman, if he would read that so that we will be familiar with it.

PRESIDENT HOWARD: All right, read it.

SECRETARY BLACKERBY: "The Secretary of each county society shall forward its assessment together with its roster of all officers and members, list of delegates, and list of non-eligible physicians of the county to the Secretary of this Association on the first day of January in each year.

"Any county society which fails to pay its assessments, or make the report required, on or before the first day of April in each year, shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met."

J. W SCOTT: I would like to ask Mr. President, what restrictions there are in the use of the Society's funds. That could be not as a remission of dues but as an outright gift of the Association to certain societies. It seems to me that societies like Fayette County and Christian and such counties as have comparatively large memberships ought to take pleasure in remitting the dues. I don't want any concession, for my part, for Fayette County. I think Fayette County is glad to do it; I think it would be glad to do it and at the same time see that the smaller counties where the condition which the President has referred to exists shall get relief, because it certainly is burdensome for those counties where the income is much more limited, generally (the average income of doctors in the outlying districts is less than it is in the cities, I presume). I think if some plan might be devised by some shrewd lawyer or some good trickster in our profession to circumvent that By-law and making a gift, is there any reason why the Society shouldn't dispose of its funds in any way it sees fit? Can't it do it by making a gift to a county society of so much, or a subsidy, or a grant in aid, or something like that?

PRESIDENT HOWARD: I imagine we could establish a war fund.

J. A. ORR: I don't see any reason why this Society can't appropriate the money that it sees fit. We appropriated money for other funds, memorials, and what not.

I move you, sir, that this Society appropriate a sufficient amount of money to each county society to pay the dues of those men in the armed forces.

The motion was seconded.

PRESIDENT HOWARD: Just to clarify it, do you mean to pay all the dues or the part that would go to the State Association?

J. A. ORR: Pay the dues that are due to the State Association.

C. F. WOOD: Would that include the A. M. A.?

PRESIDENT HOWARD: You wouldn't have to include them.

GANT GAITHER: Mr. President, I do not believe that this Society ought to go on record and do any such thing. It is sort of like lifting yourself up by your bootstraps, and I think it is just the wrong way to get at the thing. In Christian County, and I suppose in Fayette you have had the same experience, it took just about ten minutes for us to make up the small amount of money that was necessary to pay the dues for some eight or ten men who had gone from Hopkinsville in Christian County. There may be one or two counties in which you have four men and three of them in the service. My thought would be to make a notification that it is the recommendation of the Society that the counties who can do so will absorb by voluntary subscription of their own members in each county the dues for the men who are absent; in the smaller areas where you have just a few doctors, I think if I were practicing in a county and had just one competitor and the competitor were taken away, I could afford to pay six or seven dollars for him. (Laughter) I don't see any reason to go on record to try to get this Society to do something

in contravention of our By-laws for a very tiny bit of money.

PRESIDENT HOWARD: Gentlemen, I would like to have the Secretary tell us how many from the State of Kentucky are in the armed services. What would be the cost to the State Association?

SECRETARY BLACKERBY: I am glad you brought that up because I prepared the roster to be published in this Journal. I haven't had anybody complaining to me, maybe it is because they couldn't get to me, but I know there are some omissions in the list, but the approximate number is between 500 and 550. Of course, the state dues are five dollars. That would run somewhere around $2500.

C. F. WOOD: They are not all members.

J. A. ORR: That would all come right to your State Association, though.

SMITHFIELD KEFFER: Why not just say if a man is in the armed services we will remit his dues?

J. A. ORR: The State Society wouldn't be out anything. If you pay five dollars to any county, Menifee or Carter, for a member of that county society who is in the service, that five dollars comes right back into the State treasury. The county and the state society are not out a cent.

ROBERT H. ENGLISH, Hopkinsville: I am from Christian County, and I am one of these boys you are talking about who got into the army. Speaking for myself, I know that I am not only glad to pay my dues, but I know the experience of Christian County was this: that when the doctors in the service were informed their dues were being paid, they wrote back letters saying, "Thanks, boys, it is grand of you, but I still want to pay my own dues." We still have enough money to kick in our bit. This thousand dollars or twenty-five hundred that it would take really wouldn't help us out a great deal. I am in favor of the suggestion of Dr. Gaither to give these men an opportunity rather than trying to give it to us; we don't need it.

J. W. SCOTT: I think that is splendid from his point of view, but on the contrary, my face would get red if I were making money from this man's absence and were not willing to pay his dues. If the two men are competitors and one is gone, the other fellow can pay five dollars in a year, and I just think we ought to be ashamed to have these boys in service and not assume their dues, and pocket the money that would go to them.

A. H. BUSH: I have a son in the Army and I know his feeling, and I believe if you left it up to him and if you left it up to the others (we have five members in the society and we have three in the service) they would want to pay their own dues.

C. F. WOOD: I think the facts speak for themselves, that we have suffered a very definite loss in membership through men going in the armed services not paying their dues to the county societies.

PRESIDENT HOWARD: We have lost a lot of our membership in the A.M.A.

C. F. WOOD: I think that is the best evidence there is. Of course the fact remains that they haven't paid their dues. The fact remains that our membership is less because of that, and therefore I think it is up to us. As Dr. Scott says, we certainly would feel very badly to think that a man had lost his membership in our society merely because he had gone in the armed services and hadn't paid his dues. I think it is up to the society to keep those men in active membership.

PRESIDENT HOWARD: Dr. Orr, the hour is getting late. Would you rather see this come to a vote with the small delegation we have here now?

J. A. ORR: I suggest it lay over until later.

PRESIDENT HOWARD: Do you think it would be better to have a full delegation? Would that suit all you gentlemen? It occurs to me there is a lot of difference of opinion. We want to do what is right and we want to be sure we are right, so let's get a full delegation at some other meeting and bring it up. I am anxious to see it brought up, because we want to do something about it.

The meeting then is adjourned until after the dinner tonight.

The House recessed at 5:35 p. m.

E. M. HOWARD DINNER

Monday, October 4, 1943

On Monday evening, Dr. E. M. Howard, President, gave a dinner to the officers and delegates of the Association.

At the opening of the dinner, O. O. Miller, Louisville, Vice President, delivered the following invocation:

Dear God: who art the Giver of every good and perfect gift, who hast made us in thine image to honor and serve Thee, we come to Thee at this time with our petitions. We thank Thee for our friends. Help us "to grapple them unto our bosoms with hoops of steel." We thank Thee

for life and the capacity to enjoy it. We are grateful for Thy manifold blessings and for Thy word and for the truths contained therein. For Thou hast said, "Then I commended mirth, because a man hath no better thing under the sun than to eat, and to drink, and to be merry. For that shall abide with him of his labour the days of his life, which God giveth him under the sun."

"Behold that which I have seen; it is good and comely for one to eat and to drink, and to enjoy the good of all his labour that he taketh under the sun all the days of his life, which God giveth him; for it is his portion."

For these and all Thy mercies, O Lord, we are grateful

We are not unmindful, O Lord, that he of the stalwart frame and virile mind is not with us; he has been called from his labours; we miss him, and that other who served this generation and Thee. We know not what to ask for them, unless it be what we would ask for ourselves; forgiveness of sins and an abundant entrance into Thy Kingdom. Help us to believe "they have joined the choir invisible, and live again in hearts made better by their presence."

We would remember before Thy throne of Grace and Mercy, our confreres on the far-flung battlefronts; sustain them in their labours, protect them by Thy might, and finally restore them to the bosoms of their families. Grant unto the world peace, O Lord; bring in the brotherhood of man, and hasten the day when wars shall be no more. Bless each family represented here tonight. We thank Thee for this fellowship.

Bless this food to our use and us to Thy service; in His name's sake, we ask it. Amen.

At nine o'clock, Dr. B. W. Smock, Chairman of Arrangements for the meeting, called the gathering to order.

Toastmaster B. W. Smock: At this time I would like to call your attention to the fact that we have two very illustrious members of our profession visiting us from the Armed Forces: Lieut. Col. Clayton McCarty, from the airfield at Nashville, (applause) and his very distant relative from the western part of the state, Lieutenant Clardy.

The physicians of the Kentucky State Medical Association have spent a great deal of thought endeavoring to determine who was the outstanding practitioner in the State of Kentucky, and after a great deal of study they have decided that Dr. T. A. Frazer, Marion, represents the ideal general practitioner of medicine. (Applause.) Dr. Frazer, I am informed that you have been selected by a group of physicians of this Association as the most outstanding general practitioner of medicine in Kentucky, and to that end it is our desire to present you with a little trophy that you may keep on your desk and that will be a constant reminder of the love and esteem that the officers of this Association, its Council and its Delegates, hold for you, and it is a pleasure to present to you at this time a desk pen as a tribute of our affection.

I feel it would be very fitting at this time to have Dr. Frazer's lifelong friend tell you of a very interesting consultation that he happened to have with Dr. Frazer a few years back. Dr. C. C. Howard.

C. C. Howard, Glasgow: I believe on this occasion with all its clinical manifestations and ramifications that you will agree with me that this is the finest diagnostician in the State of Kentucky.

Just this last Spring, along in March or April, Dr. Owsley, of Cumberland County, called me up and said, "Howard, I have a fellow over here I am going to have to send over to the hospital. He gives me so much trouble that I want you to observe him for a few days."

I said, "Well, I 'lowed that or you wouldn't be sending him." I said, "What's the matter with him, Owsley? It would help me out if you'd tell me that."

He said, "Well, this is a good fellow, an an old bachelor about thirty years old, and he's a little nutty." He said, "Otherwise I believe he's a moron. But he works well on the farm, produces well, lives with his mother and two or three older sisters, and they live down here in the hill country and they have the finest spring water, a fine home, and this boy has taken a notion that he can't drink that spring water, and he's worn 'em out all this summer catching rain water, and they put it in jugs everywhere to keep it cool, and they can't induce him to drink any spring water. They have a fine spring, one of these nice big ones that comes out of the hill, a great big bowl cut out in a nice rock, fine cold water, but they can't get him to drink it, and the family is worn out and I'm going to send him over and you see if you can ever get him to agree to drink spring water."

I said, "Well, I'm up against it. I don't know anything special about a spring. I've drunk out of a spring. You send him on."

He came, and I kept him around there and I didn't get anywhere. He would always go and turn the water on and let it run out of the spout before he drank it and say, "It didn't come from a spring, did it?"

I would say, "Oh, no. We don't have any springs here."

Frazer came up to visit me about that time, and I thought, "Well, here's my chance. I've got a fellow here who's really got brains and I'm going to have him work this spring water business out while he's here." I didn't tell Frazer all this. I took him in there and I told him about the fellow and I said, "You sit down now and find out for me about this fellow, because I'm going to send him home. There's nobody here now; you can sit down and stay. I'm going upstairs and I'll be working a while."

Well, Frazer came up after a while and said, "I've got that thing solved."

I said, "My God! I'm awfully glad. What is the trouble?"

"Well," he said, "after you left this fellow got me to close the door and lock it and assure him that his mother and everybody was at home, and he got to whispering. I said, 'What did you say was the trouble with that spring water?' He said, 'Well, you know, it was along in February, and there was a soldier back home from the camp, and I heard Mary talking to him and she said that she was going to give birth to a baby in the spring.' "

B. W. Smock: I know that our hearts are full of appreciation this evening for the hospitality that we have enjoyed at the hands of our President, Dr. Murph Howard. I know of no man in Kentucky better qualified to express our appreciation than our illustrious and distinguished Kentuckian, Dr. Irvin Abell. (Applause.)

Irvin Abell: To me has been assigned the very pleasing duty of expressing to our gracious host our appreciation for his most generous hospitality. Dr. Howard graduated from the Medical School of the University of Louisville in 1908 and subsequently did postgraduate work at the New York Polyclinic, the Chicago Polyclinic, the Illinois Postgraduate Medical College and in various European centers and clinics. Throughout his years as a practitioner of medicine he has been a valiant supporter of the principles, policies and activities of his county society and the State Medical Association.

The positions of honor and trust which he has held in both offer convincing testimony of his possession of qualities of medical leadership. He served as secretary of the Harlan County Medical Society and was later honored with its presidency. He has represented his county society in the House of Delegates, and served as a continuing member of the Harlan County Board of Health from 1915 to 1929. In 1923 he delivered the Oration in Surgery at the annual meeting of the State Medical Association, his subject being "Why, When and How." He was made President Elect of the State Medical Association in October 1941, and became President September 29, 1942, delivering his presidential address on the subject, "War and Disease."

Dr. Howard is a Fellow of the American Medical Association and a Fellow of the American College of Surgeons. In July 1928, he took oath of office as a member of the State Board of Health, and was immediately elected President of the Board for the ensuing term which began in the following January. From that time until the present he has been continually re-elected President of the State Board of Health, in which position he continues to serve the medical profession and the state in promoting the public health of the people of this Commonwealth.

I think we are particularly fortunate in Kentucky, in that the law provides that the members of the State Board of Health are selected by the Council of the State Medical Association and that they in turn select the Commissioner of Health. The criteria for appointment in both instances are honesty, ability, medical competency, and the willingness to undertake public service duty.

It is true that to the Governor has been delegated the responsibility of making the appointments to the State Board of Health, but he is limited in his choice to a list of names selected by the Council of the State Medical Association. This law has assured, in the years gone by, a non-partisan, non-political administration of health matters, with the result that we have seen in Kentucky a record of efficiency which has been unsurpassed by any other state in the Union.

I am sure that you will be glad to learn that both Mr. Donaldson and Judge Willis, candidates for Governor, have expressed themselves as being in complete sympathy

and accord in continuing the present status, firm in their belief that the administration of health matters in Kentucky under the present law is placed where it belongs; the responsibility devolves upon the medical profession, the members of which constitute the only body of men fitted by education, training and experience to carry out intelligently such duties. As long as the medical profession supplies the Board of Health with members of ability, of public spirit, of unselfish character, such as Dr. Howard and his associates, we can be sure that we will have the support of the public, and at the same time will have their resentment against any intrusion from politics.

Dr. Howard, since 1915, has been Surgeon-in-charge of the Harlan Hospital, and while busily engaged in his professional duties, he has found time to devote his attention to civic affairs. He has been, for instance, a director of the Harlan National Bank for more than twenty years; he is a trustee of the Presbyterian Church in Harlan, and has been for many years; he is a member of the governing board of the Kentucky Y. M. C. A, and these appointments I think evince quite clearly that his powers of leadership are not confined entirely to the association of medicine and medical affairs.

During the past two years he has served as President Elect and as President, and these years have been rather eventful ones for our Association. The insensate greed and ambition of a coterie of evil men have brought to our nation a war the ramifications of which are felt by every one of its citizens. It has made a particular impact upon the members of our Association, 475 of whom are serving with the Armed Forces, while those remaining at home have assumed an increased burden which for many comes at a time of life when added years give ample grounds for aspiration to ease the load.

The 475 names of our service flag represent the flower and the youth of the profession of Kentucky, and under normal circumstances, Dr. Howard, some of these this evening would have been your guests. We are indeed proud of our members who are participating in the war effort, knowing full well that they will give a good account of themselves and reflect credit upon the profession from which they stem. We can only hope and pray that they will return to us safe and sound, to resume their places in civilian life, secure in the regard and the esteem of those of us left behind, and consoled and comforted by the exhilaration that comes from the fulfilment of a patriotic duty.

Dr. Howard, there are others whom we miss tonight, two of whom were members of your official family. Their loss during the past year has brought to each and every one of us deep regret. President-Elect Turner throughout his lifetime gave faithful service to his community, and both by precept and example he portrayed the faithful heritage of our profession. Secretary-Editor McCormack was in reality an institution. He combined qualities and characteristics which nature has given to but few of her favorite sons. I am sure that his requiem is sung by the sorrow in our hearts and by the daily application of the welfare measures which he instigated, originated, and implemented in our fight against ignorance and disease. I think we may assume that the absentees tonight join us in an appreciation of Dr. Howard as a friend and in our esteem for him as a constructive factor in the broad field of medicine.

Those of us here present, Dr. Howard, congratulate you upon the honors which have come to you throughout your career, realizing that they are but a recognition of the services which you have performed. We felicitate you upon your successful administration of the presidency of the Association at a time of stress and strain, and we offer you, Dr. Howard, our thanks and our gratitude for your generosity, for your kindness, and for your thoughtfulness in providing for us a happy and a memorable evening. (Applause.)

B. W. Smock: The case is closed. Murph Howard has been found guilty of being a gentleman of many attainments, but most of all one of the most excellent executives the State Association has ever had.

At this time we will hear from Dr. Howard in response, and at the conclusion of his remarks the House of Delegates will be called into session to continue the business from its recess this afternoon.

E. M. Howard, Harlan: It gives me a lot of pleasure to have you all here with me as my guests. I wanted to invite you here to eat with me tonight. I turned the matter over to Dr. Wilson Smock, the Master of Ceremonies, than which there could be no better, but I didn't know I was going to be asked to make a speech. I thought I made my speech last year. When I saw these programs with my picture, it was all

as new to me as it was to you, and when I saw that I was on for a response, I just felt that I had nothing to say except that I am truly glad to have you all with me.

You have been good to me. You elected me your President, and during the year 1943 whatever we have accomplished has not been by my effort, as you all well know, but it has been from the fact that we really have talent in this Association, and through the various committees and the active endeavor of all of you we have accomplished some things.

My idea of being President of your Association, is an undertaking that consists of an old alliance not rocking the boat, and keeping the keel as steady as possible, and seeing that the various committees that are appointed function. They functioned just a little too well tonight, because they got me on this program.

I really believe that our Association is accomplishing a lot; not especially by my endeavor, but the mere fact that we haven't rocked the boat and have kept it steady, and I predict that we have started on some things that not only our people of the State of Kentucky will profit by, but I think they will be far-reaching enough that we will even be copied some day by some of the other states in this matter, as we have in the past in many others things under the leadership of our good friend who has gone on, Dr. McCormack.

I told you last year when I was elected that we intended to do something about tuberculosis. I thought it would take a long drawnout educational campaign, and I planned to visit all the counties of the State of Kentucky, to visit all the societies and get some good speakers, and just sit steady and manage the thing; but the rationing prevented that, and therefore we narrowed down and concentrated on our official family at Frankfort; after working on the matter and having, fortunately, in the Governor's chair a man with milk of human kindness in his heart sufficient to see the vision that the doctors of your committee and all of us showed him, and after getting him to Hazelwood, and affording him the opportunity to see the picture, to see the need, then the fact that he had the money available, made it possible for us to have the institution that is now under construction. I think you miss something if you do not go to Hazelwood and see the magnificent $600,000 annex to the State Sanatorium.

You have heard in the Council's report today of our plans to continue the tuberculosis program. Some of us have lived just exactly long enough to know that we have been selfish in living and working for ourselves all our lives and it is just about time that while we are working for ourselves we branch out and begin to help the people of the State, and we are now in the position where we can do it.

Tuberculosis is not all. Cancer is just as vital, and help is needed just as much as in tuberculosis. Years ago you hardly knew how to pronounce the word "billion"; millions of dollars sounded awfully big, but this word "billion" staggers our imagination, but while this word is in the minds of the people we want them to realize the fact that a few million need to be spent in Kentucky on the problems of tuberculosis and cancer.

I am sorry I have taken up so much of your time. I merely thought I would come up here and thank you for coming out tonight and all getting together. Somebody said the more we get together the better friends we are, and I think that is the right idea. I am highly appreciative of the fact that you are all here. I am glad to have you with me and I hope we can have many more years together. (Applause.)

THIRD SESSION

Monday Evening, October 4, 1943

The House of Delegates was called to order at 9:30 p. m. by the President, E. M. Howard.

PRESIDENT HOWARD: Gentlemen, this afternoon you know how steadily and how closely we all worked. Somebody remarked that this is the first day that the House of Delegates met all day, and we stayed with it late, but we didn't get through.

Virgil Simpson has a report of the Delegate on the Revison of the U. S. Pharmacopoeia.

REPORT OF DELEGATE ON THE REVISION OF THE U. S. PHARMACOPOEIA

VIRGIL SIMPSON, Louisville: Mr. President and Members of the House of Delegates: For so many years now I have been making some annual report of my stewardship as your representative on the Committee for the Revision of the United States Pharmacopoeia that you should by this time know something of its origin, of its function, and of the work that it has done.

I sometimes feel in consultation work that the Pharmacopoeia plays a relatively small role, however, in the therapeu-

tic activities of the doctors of this state. Most of the doctors with whom I have had contact are much better versed in some trade-name preparation than they are in official names as registered in the Pharmacopoeia.

As you know, the United States Pharmacopoeia Revision Committee is not a United States activity. It was not recognized by the United States Government until the Pure Food and Drug Law was enacted, and the Congress and the Senate then found that they had no yardstick by which to enforce the Pure Food and Drug Act, and in looking about for a yardstick they found one readymade in the United States Pharmacopoeia and adopted it as the standard.

It has been meeting every ten years as a matter of a revision committee. The membership of that committee is made up of representatives from state medical associations such as this, from state pharmaceutical associations, from medical schools that are recognized, from schools of pharmacy, and from certain manufacturing biologic and pharmaceutical associations.

Until the last twenty years, the United States Pharmacopoeia was controlled largely, after its first two decades, by representatives of the pharmaceutical profession, but the last two decades have shown that the medical profession has had a bit more interest than formerly and has been taking an active part in the revision of the Pharmacopoeia.

So much, then, for a thumbnail sketch of what the organization represents.

One of the things that has been adopted as a new procedure by the Pharmacopoeia in this last ten-year period has been the decision to make the Pharmacopoeia an instrument that was revised to date. Until the present decade, the book was revised only every ten years, which I think accounts for a great deal of the lack of interest manifested by the medical profession. They thought that it was antiquated, out of date, and by the time a drug got into the Pharmacopeia it has been used and known so long by the medical profession that they needed no such book. Now the book is being revised every five years as a matter of a new edition, and in addition to the five-year revision plan, every year as many supplements are issued as are found to be necessary. In other words, if a drug is found not to possess the qualities which we think are necessary to admit it to the Pharmacopoeia that is issued as of June 1942, by the end of that year if information has been accumulated that demonstrates the need for such a drug that it is worthwhile to be admitted, then in the supplement that drug is made official and becomes a part of the Pharmacopoeia. So that from now on, the United States Pharmacopoeia issued every five years with its annual or more frequently issued supplements will be found to be a book entirely up to date.

The present Pharmacopoeia will be found to contain a number of the newer drugs, and we have been sometimes criticized for delay in admitting new agents to the Pharmacopoeia. I might cite as one illustration to disabuse your minds that haste is not always the best method of procedure in revising a book of this sort, that we were urged in the revision of U. S. P. X to admit the serum that was then thought to be a specific for pneumonia Type II. It was not admitted. We were criticized because we did not admit it, not only by the members of the medical profession, but also by biologic houses. Within sixteen months after the book was issued, the late Dr. Cooper found that Type II, so-called, was not a type but was a group, and out of that Type II additional types of pneumococci were isolated. Now we have a serum representing a specific action for Type II pneumonia, but which could not have represented that type in 1935 or '36.

The following drugs have been introduced in the Pharmacopoeia and are now official: Estradiol, ergonovine, hexavitamin capsules, liver B vitamin concentrate and injections. I might say here, by way of interpolation that the United States Pharmacopoeia now carries a most unusual and unique method of standardization of a biologic product which had never been undertaken by any Pharmacopoeia by any nation prior to our action. We now standardize liver preparations on human beings, this being the first instance of such standardization having been adopted. All preparations of liver today are standardized by their action on known sufferers from pernicious anemia.

Following the established plan for publicity, the proposed editions and changes that made up the first U.S.P. XII bound supplement prepared in mimeographed form and widely distributed prior to the meeting in New York, in addition to the drugs which I have mentioned we have

a number of the sulfone group: sulfadiazine, which is now official, and official also as tablets; sulfadiazine sodium as a soluble preparation; sulfadiazine sodium sterile, which can be used parenterally; sulfaguanidine; sulfathiazole; totoquinine, and totoquinine is a preparation which was adopted not because it possessed unique qualities, not because it could displace quinine or quinidine, but because of conditions which were anticipated with reference to the war, making cinchona preparations scarce, it was deemed advisable to make totoquinine official. It represents the alkaloids present in the cinchona preparation but which are not as strong, not as potent, as the alkaloids themselves, and it is much cheaper.

We also have admitted some of the vitamin preparations, and I think a serious mistake has been made, not by our Committee on Revision so much, but by the quasi-permission, I might say, of the Committee in permitting everybody who wants to sell vitamin preparations to do so. The result is that today, notwithstanding the fact that the standardization of these preparations has been made official, one can purchase vitamin products from not only drug stores, but they may be purchased from groceries and from dry goods stores and almost any sort of place where things are bought and sold. It is unfortunate, and the newspapers and magazines have so popularized these preparations that I think perhaps today more money is being spent for vitamin preparations on their own initiative by the buying public in the United States than all other drugs combined.

We have already begun the work of revision of U.S.P. XIII, although U.S.P. XII has now been official only a little more than a year. A part of that program consists of the publication of a completely new book, about December 1945, and it will become official in July 1946. The medical men who comprise the group of the Subcommittee on Scope are now engaged in a study of U.S.P. XIII and are looking on the preparations that are already official and those that have been proposed for deletions and for admissions. When these are finally decided, they will be assigned to referees selected for their special knowledge of the chemical value of drugs under consideration. These referees will be requested to report to the entire Scope Committee at a meeting planned next January on their findings and their opinions concerning the worthwhileness of the new preparations, and then votes on admission or deletion will be taken.

It is particularly proposed that the content of the United States Pharmacopoeia Thirteenth Edition will be so critically and efficiently selected as to basic therapeutic active substances, diagnostic agents, surgical aids and preparations of efficiency, that the U.S.P. XIII will be widely accepted as an authoritative therapeutic guide not only for medical schools, but for the medical profession of the country at large. (Applause).

PRESIDENT HOWARD: We will next have the report of the Committee on Scientific Exhibits, Dr. Harry M. Weeter, Chairman.

REPORT OF COMMITTEE ON SCIENTIFIC EXHIBITS

HARRY M. WEETER, Louisville: There won't be a great deal to report verbally on the scientific exhibits. We have one interesting one, "The University of Louisville at War," which is of interest both to the physicians and to all others, since it covers the entire field of activity. We have one on blood plasma by the Blood Donors' Division of The American Red Cross, which those of you who have not been in close contact with should see because it shows what can be done with a little bit of blood in a large way. A number of others, one by the State Board and others by physicians, have all been set up in the South Alcove Room.

We were sorry the number submitted was not larger, but transportation and rationing and scarcity of men, a good many of them who have been exhibiting not being available, interferred; the number is reduced, but we think the quality is much improved. Exhibits will be open both tomorrow and the day after for observation.

PRESIDENT HOWARD: There is a matter of unfinished business that was raised before the House of Delegates this afternoon at a late hour.

SECRETARY BLACKERBY: It was included in the report of the Committee on Public Relations, for discussion in the House of a bill that is now before Congress.

PRESIDENT HOWARD: We will have Dr. Abell introduce this subject. He gave his report this afternoon and there was discussion on it. We will ask him to start off the discussion tonight.

Discussion of Report of Committee on Public Relations of Wagner-Murray-Dingell Bill

Irvin Abell, Louisville: Mr. President, your Committee on Public Relations felt that this bill was so important in its implications to the medical profession that every means and every opportunity should be given to every doctor in this country to know its full import. It is known as the Wagner-Murray-Dingell Bill, and it is now proposed that hearings upon this bill be held in Washington. It really stems from the National Health Conference, if you may call it that, which was held in Washington in 1937, and the same individuals who were responsible for that particular outburst are behind the present bill.

It is quite certain, I think, that the new Council on Public Relations established by the American Medical Association at its last annual meeting will be most active in acquainting the doctors of this country with the import of the bill, and also in taking suitable measures to combat it.

In the June issue of the American Medical Association Journal, you will find an analysis of this bill by the Bureau of Legislation of the American Medical Association. I would suggest that each and every one of you who have not that copy of the Journal in your files write to the American Medical Association and secure it, because there you will find the details of the bill as pertaining to medicine.

The bill is quite a lenghty one, and endeavors to take in all of social security in this country in regard not only to sickness and the provision of medical and hospital care, but also all other of the various, shall I call them ailments that afflict man from the time he is born until he goes to his grave, so that the bill really has an implication and interest to us, not alone as doctors, but as citizens of the country.

I should like to read to you from an editorial in the Journal some of the provisions in so far as it places power for control of all medical activities in this country in the hands of the Surgeon General of the Public Health Service. I do not interpret this really as a criticism of the present officer who holds that position, but merely as an appraisal of the bill which will place in the hands of one Federal official absolute control of medicine throughout the entire country.

"The Surgeon General of the Public Health Service is hereby authorized and directed to take all necessary and practical steps to arrange for the availability of the benefits provided under this title.

"The Surgeon General is hereby authorized to negotiate and periodically to renegotiate agreements or cooperative working arrangements with appropriate agencies in the United States or of any state or political subdivision thereof, and with other appropriate public agencies, and with private agencies or institutions, and with private persons or groups of persons to utilize their services and facilities and to pay fair, reasonable and equitable compensation for such services or facilities."

Everything is left within the hands of the Surgeon General.

"There is hereby established a National Advisory Medical and Hospital Council to consist of the Surgeon General as Chairman and sixteen members to be appointed by the Surgeon General," in other words, his own group. "The Surgeon General shall publish and otherwise make known in each area to individuals entitled to benefit under this title, the names of general practitioners who have agreed to furnish service."

They stress the fact in the bill that the patient is to have the opportunity of choosing his own physician. That is true only in so far as he chooses from the physicians who have agreed to accept service. It does not mean that his own physician will have agreed to accept that service at all.

"Services which have been deemed to be specialist services shall be those so designated by the Surgeon General, and the practitioners from among those included in paragraph 1 above who shall be qualified as specialists and entitled to compensation provided to specialists shall be those designated by him as qualified to furnish such special services." In other words, the Surgeon General will have the power to designate who are specialists in this country, regardless of their training.

"The payments from trust funds to the general practitioners shall be made on the basis of fees for service rendered to individuals entitled to benefits according to a fee schedule approved by the Surgeon General." You will have nothing to say to that.

"The Surgeon General may prescribe maximum limits to the number of potential beneficiaries for whom a practitioner

may undertake to furnish general medical benefit.

"The Surgeon General is hereby authorized to establish necessary and sufficient area and appeal bodies.

"The Surgeon General shall publish a list of institutions found by him to be participating hospitals." In other words, he is the one to determine hospitals which will be designated to furnish service to the people of this country.

"The Surgeon General and the Social Security Board may determine for any calendar year that every individual entitled to general medical benefit may be required by the physician furnishing such benefit to pay a fee with respect to the first service or with respect to each service in a spell of sickness or course of treatment.

"The Surgeon General and the Social Security Board jointly shall have the duty of studying and making recommendations as to the most efficient methods of providing dental, nursing and other needed benefits." In other words, they go beyond the field of providing medical service but take in practically all of the services which have to do with the promotion of health.

"The term 'laboratory benefit' means much necessary laboratory or related services, so far as the commodities, as the Surgeon General may determine, including chemical, bacteriological, pathological, diagnostic and therapeutic x-ray, and related laboratory services, physiotherapy, special appliances prescribed by a physician, and eye-glasses prescribed by a physician, or other legally qualified practitioner.

"With respect to inclusion in the list of participating hospitals, the Surgeon General may accredit a hospital for limited varieties of cases and may accredit an institution for the care of the chronic sick."

Now, that gives you just a brief idea of what the bill provides in so far as who shall determine the character of service, the amount of service, and by whom that service is to be rendered.

It is interesting to note that, as I say, the bill has implications for us as citizens of this country in addition to practitioners of medicine. I should like to quote to you some statements of Mr. C. O. Pauley, President of the Insurance Economics Society of America, in an address which he delivered in Chicago.

"During the last fiscal year, the two per cent tax on wages for old age and survivorship insurance amounted to 895.6 millions. It is estimated that for the fiscal year just ending this will run considerably over one billion dollars. On that basis, the twelve per cent tax proposed in the Wagner Bill would produce revenue in excess of six billion dollars from those under the present Act. In addition to this, it is proposed to bring under the Act many employed persons not now covered, and to place a tax of seven per cent upon all of the self-employed, numbering twenty to twenty-five million. This is not all of our social insurance program, however, because the railroad employees of the country, two million in number, have a separate board and insurance system of their own. Neither does it include federal, state and municipal employees, estimated at 6.5 million, most of whom are now covered under some retirement fund and other insurance benefits, and will eventually be included in any Federal plan. I think it is perfectly safe to conclude that if the Wagner Bill were enacted into law, the initial tax under all of these programs would exceed ten billion dollars annually. This is only at the beginning of the program, however. Eventually the most costly part of the program will be the old age and survivorship insurance, the cost of which will finally be an additional five billion dollars per year, or more. In any event, the minimum cost when the program is in full operation would be twenty per cent of pay rolls of employees and self-employed up to $3000 per year."

I wonder how many of you know the number of people in this country who earn $3,000 a year or less. I asked that question during one of our conferences in Washington with the technical committee, and they finally were forced to admit that would cover 93 per cent of our population so that if such a bill as this becomes enacted into law, you and I and the rest of us who practice independent medicine will have the total of seven per cent of our population as our patients.

There is another interesting thought which he brings out: "What will the effect upon the character and the enterprise of a generation which knows that from before its birth in a government hospital, until it is laid away in the grave, a benevolent governmental bureau will pay the costs of being born, the costs of its education, will supply its recreational

needs, will furnish medical service and hospitalization in illness, provide an income during unemployment and sickness, and a pension if permanently disabled or retired by old age? What becomes of the incentive to rise above the conditions in which the individual is born? Will it not result in the rise of only a few who are born with great inner driving power and an unusual ambition, while the great mass of our people settle down on a dead level of security such as prevails in most European countries? Is it not possible that we may overreach ourselves in our efforts to give every man complete freedom from want and from fear without any responsibility on his part? It was the desire to achieve freedom from fear and from want for themselves and their families which urged men on from our eastern coast to settle the wilderness and prairies and has made our nation what it is today. Perhaps the striving for the goal has been and is more important in the life of a nation than the goal itself."

One thing that is bound to interest us is the size of bureaucratic personnel that would of necessity be required for the administration of a social security program the income from which at minimum figures is ten billion dollars a year. He gives some rather interesting figures in regard to that, and points out that the danger of bureaucracy doesn't exist in Washington alone, but it is spreading over the entire country. The State of Ohio, for instance, has 25,000 state employees. There are 90,000 Federal employees in that state. Massachusetts has 21,000 state employees; there are 129,000 Federal employees in the state. Pennsylvania has 44,500 state employees, and there are 215,000 Federal employees in the state. Wyoming operates its state government with 1100 state government employees, but there are 6200 Federal employees in that state. This does not include the armed forces.

"In addition to all these various governmental bureaus, each vying with another for increase in its importance, the amount of money it can spend, and the number of people it can employ, we have more recently developed hundreds of governmental corporations, some of which are not even audited by the Treasury or any other governmental department. The American bureaucrat seems to have a peculiar genius for hiring additional employees. The OPA has 2700 lawyers. England, which has a price control organization similar to the OPA, has managed to struggle along successfully with just ten members of the legal profession."

These are some of the thoughts which he has presented in his address, which I say should interest us as citizens in addition to the peculiar portions of this bill which apply to us as doctors.

I shall be very glad, Mr. President, if you would open this to general discussion and let us have the ideas of some men who have studied the bill as it has been presented. (Applause.)

PRESIDENT HOWARD: Gentlemen, this matter is now open for general discussion. Let us have a free and frank discussion. It is a matter of great importance.

VIRGIL SIMPSON, Louisville: I have listened, with considerable interest to Dr. Abell's presentation of one of the most iniquitous bills in all of the legislation in the history of this or any other country. I have, of course, been particularly and peculiarly interested in the matter of medical economics for a number of years, but I confess that the colossal proportions of this bill known as the Wagner Senate Bill 1161 has paralyzed my imagination.

Let me give you just a few things that the Surgeon General (and I don't care whether he accepts it as a personal criticism of him or not, I am not quite as liberal as Dr. Abell) of the Public Health Service can do. I think the estimate of ten billion dollars as accruing in the Social Security renewed and extended Act as proposed will be nearer fifteen billions of dollars, and it is provided and set up within the confines of the Act itself that an interdepartmental agency be set up and the bill itself expressly says that the "Surgeon General hereby is authorized and directed" to carry into execution the objects of this interdepartmental activity.

This department which the Surgeon General will preside over is dedicated to the professional and hospital care of the sick in this country, and it provides that twenty per cent of the total amount accruing to the security fund, which I say will approximate fifteen billions of dollars, will amount to three billions of dollars. Think of the Surgeon General of the Public Health Service, a doctor, having three billions of dollars at his command to expend under the direction of the bill. All he has to do is to approve bills and the Treasury of the United States will pay them, and the only check on his activities is that of

this advisory committee which he himself appoints.

Now, what can he do with three billions of dollars? He can hire 120,000 practicing doctors in this country at an average salary of $5,000 a year. He can take over the medical schools, sixty-six Class A medical schools in this country, and take over their overhead expense, under the provisions of this bill. He can subsidize 6,000 medical students who would be in attendance in these schools, at a cost of $750 each. He can take over every private hospital in the United States and pay them $5 per bed per day. He can take over every governmental hospital in the United States and pay them $2.50 per bed per day. He can then spend ten millions of dollars for drugs. He can spend another ten millions of dollars for research, so-called, under his special direction. And then what does he have left? Nearly eighty millions of dollars left for administering its purposes. If you like that kind of law, vote for it. (Applause.)

E. L. Henderson, Louisville: I heartily approve of everything that Dr. Abell and Dr. Simpson have said. This is your problem. I know that a great many of you feel that the American Medical Association is not stepping out and taking the active leadership that they should take, but the American Medical Association is fighting your problems all the time. This is a problem of your own. If you don't get out and do something about it, we are going to have real socialization of medicine. If the Wagner-Murray-Dingell Bill should pass, which I hope we will never see, we will have socialization of medicine such as no country in the world has ever had, and if you gentlemen don't get busy with your Congressmen and your Senators we are going to have it.

Dr. Simpson has told you something about what the Surgeon General of the Public Health Service would have in his hands, the power that he would have under this bill. I happen to know that the present Surgeon General of the Public Health Service does not favor this bill, but regardless of whether he does or whether he does not, if this bill should pass, he or whoever happens to be the Surgeon General of the Public Health Service at the time that this should be enacted and put into law will have to enforce it, and as Dr. Abell has told you, there will be about 93 per cent of the population of this entire United States that has an income of $3000 or less.

Irvin Abell: Ninety-three per cent has less than $3,000 and seven per cent have over that.

E. L. Henderson: That is in normal times. There are a lot of people who have incomes today that possibly exceed that, but in normal times that is the average, that many people have an income of $3,000 or less; in other words, there would be seven per cent of the people of this country who could come to the practitioner that will not submit to governmental control.

Now, gentlemen, this is your problem; it is the problem of every practitioner of this country. It isn't just a problem that the American Medical Association or the Kentucky State Medical Association or any other association of this country can fight alone; they cannot defeat the Wagner-Murray-Dingell Bill. Unless every practitioner in this country gets busy and takes an interest, this bill might become a law, and if it does we are going to have real, sure-enough socialized medicine in this country.

Gant Gaither, Hopkinsville: I would like to make a motion that Dr. Abell be asked tonight or in the morning to call Senator Alben Barkley and Senator A. B. Chandler at the request of the House of Delegates of the Kentucky State Medical Association, and ask them if they will help us to defeat this bill, and, if possible, to report back to us during our present session so we can know whether we can count upon our two Senators on this. I put that in the form of a motion.

E. L. Henderson: Dr. Gaither, we have eleven Congressmen from the State of Kentucky who have just as much interest as the two Senators from Kentucky.

Gant Gaither: I thought this was in the Senate at the present time and not in Congress.

E. L. Henderson: It will be in both the Senate and the Congress before it is passed. It has to be passed by both of them.

Gant Gaither: I understand, but that could be done immediately and the Congressmen probably contacted officially from the constituents from which they came, and we could contact the Senators right away; also, it is rather cumbersome to contact all of them at the present time. In addition, there are members present who at the same time could contact their Congressmen; of course, if they did it during the session it would be equally well.

C. A. Vance, Lexington: Contact all of the Congressmen and the two Senators.

E. L. Henderson: I think that it is very important that the various doctors from this state contact their Congressmen from the various districts of the state. It would be putting the Committee on Public Relations on the spot to contact the Senators or the Congressmen from this state during this meeting, but I think that it is very important that the various members of this House of Delegates, and not only the members of the House of Delegates, but the doctors in the various sections of the state, contact their Congressmen from their districts in regard to this bill and express themselves.

Gant Gaither: There is no doubt about that.

E. L. Henderson: It is the only way it can be defeated, not only from this state, but from every state in the union, and I think that that is very important.

Gant Gaither: The thought I had was not in any wise to minimize the importance of that, Dr. Henderson, but psychologically this matter becomes political and if the men whom we approach realize we are now in session here and want their answer immediately, we will get a great deal more consideration than we will after we all drift back home, back into individual life. We speak collectively here, and with some considerable power as a state body, and I see no reason why we should not contact primarily our two chief representatives of the state itself, and if they answer that they will help us, it will be much easier to go forward with what you have in mind, Dr. Henderson, each one of us going home and contacting our Congressman, so I will put my motion as it originally stood.

O. O. Miller, Louisville: Mr. President, I should like to make an amendment to that motion. The American Bar Association recently went on record as opposing socialized medicine as against free enterprise. Now, I think it should be the sense of this meeting that the House of Delegates of the Kentucky State Medical Association is opposed to state medicine as against the best interests of the people, and we should so go on record; and that such a resolution, a copy of which should be sent to the various Representatives and Senators, should be adopted and sent through the Public Relations Committee, and then each of the men when they go back to their own counties do the individual missionary work with their patients and with their Congressmen.

C. B. Johnson, Russell: I believe it would be much more impressive on our eleven Congressmen and two Senators if one man from each Congressional District would go to Washington and personally call on the Congressman, and let the man from that district be the spokesman to his own Congressman and call on the Senators. I think then we would get somewhere. It is a hard matter to do anything by mail.

T. Atchison Frazer, Marion: We have civic societies all over the State of Kentucky, and we doctors are in contact with all of them. I presented this matter to our Kiwanis Club at Marion. I didn't make any motion. After it was explained, a layman made a motion that we write a letter to our Senators and our Congressmen and have it signed by the secretary and president of the Kiwanis Club. I took no part in it except to explain it to them. They passed it unanimously. These civic clubs all over the country have got sense enough to stand against a thing like this if it is explained to them. It is up to us as doctors to explain these things to them and let them know that it is not only to our interest but it is to their interest to do something about this nefarious bill they are trying to pass.

Secretary Blackerby: Mr. President, I am in accord with the suggestion made by Dr. Miller that the House of Delegates pass a resolution, regardless of how we approach the members of Congress from Kentucky, because in following Dr. Johnson's suggestion of one representative from each Congressional District, he would want to carry with him the whole sentiment of the profession of Kentucky as it would be expressed by the House of Delegates here.

Also in support of what Dr. Frazer has said, I want to read to you just one paragraph (I would like to read more than this but I won't take the time to do it) from an editorial in the Journal of the National Small Business Men's Association:

"There is no demand for socialistic practices in the field of medicine or in any other field in America. There can be no possible excuse for arbitrarily placing men of science engaged in basic human welfare work under political domination. It would be but a mere step forward and hardly more inconceivable to place all re-

ligion, all education, all industry, all business activity, all art and culture in the hands of a few wilful bureaucrats."

This editorial in the beginning calls attention to the fact that this bill was introduced in Congress when there are hundreds of thousands of soldiers representing business, representing the professions, representing all phases of society, away from the country with no opposition to such legislation as this. (Applause.)

W. B. Atkinson, Campbellsville: I would like to say my nickel's worth at this time. I believe that the millennium is here. We have found that Virgil Simpson and Elmer Henderson are 100 per cent in agreement, and they are absolutely right, but we as a profession are not right; we are "agin" it. We can organize and defeat this bill, there is no doubt about it. There will be another one, and we will organize and defeat that. We are fighting a defensive war, which has never been won anywhere at any time, and if the American medical men have not got sense enough or ability enough or initiative enough to set up a program for the adequate care of the people, we don't deserve to keep on winning. Now, we have been fooling ourselves. It's all right to fool other people, but we should not fool ourselves. We have been saying that we have been giving adequate medical care to the American people, when fifty per cent of our healthy young men are not fit for military training because of physical or mental ailments, somebody's fault. (The millennium is over because Dr. Simpson does not agree.) We say that we must divorce our medicine and our hospitals; they are all medical care. Until we have a program of some kind that will do something, we are going to continue to fight a defensive war. We have got to fight a defensive war just like the British Air Force had to fight a defensive war, to build up an offensive one, and if we do not have some kind of program for the adequate care of the people we are going to have trouble.

There is another thing we have been fooling ourselves on, that we want large hospitals, we want large maternity services because it would be good for the people. We do not. We want them because it is more convenient and easier in the practice of medicine. The safest place for the average woman to have her baby is in her own home, but it is a lot easier to deliver the baby if the mother is in a hospital.

Now, it is true that in a lot of cases we can argue around and say that what is better for the doctor is better for the people. I don't agree with that. If we do not get a program on this thing we are going to continue to fight a defensive war, and anybody who fights a defensive war continually might as well give up the ghost. I am in favor of fighting a defensive war until we can get on the offensive.

Irvin Abell: I would like to say for Captain Atkinson's information that the American Medical Association, the American College of Surgeons and the American College of Physicians have appointed a committee for the study of just that question. It has held one meeting in Chicago in June and another is scheduled for Washington on the 15th of this month. It is to be hoped that at this coming meeting on the 15th of this month the concrete proposals will be along the lines you mention.

Gant Gaither: May I rise again on my first thought which does not seem to have been accepted very well, and that is my idea that we would utilize the present fact that we are in meeting here assembled to get some sort of expression to show the men in Washington that we are on the qui vive and anxious to have them commit themselves to help us with this matter. It will have more effect coming from this body than when we get back home. Any method by which you approach them is all right, but I would like to get some expression while we are assembled in the next two or three days, so the authorities in Washington and the Senators and Congressmen will understand that we now are considering this matter here and wish them to know that we want it defeated, and we will have a great deal more weight with them if they know that they have been asked by our state organization which is actually in meeting while the session is now going on. I think it should be done as a body, here and now.

President Howard: Dr. Gaither, your motion was lost for want of a second. I appreciate the fact that you got up and spoke again.

I think there is no doubt but that we are all of the same opinion about this. We all know something should be done about it; we all agree on it. It is not only Dr. Henderson and Dr. Simpson, but we all agree that something should be done. It is a matter of deciding the best way to do it. If we continue to work at it we will

accomplish something. I think it would be better to take Dr. Gaither's suggestion or to take somebody else's suggestion and do something than to do nothing.

Dr. Abell has said that we should not go too fast, and Dr. Abell has had a lot of experience.

My opinion, gentlemen, is that when the medical profession goes after a thing with politicians, if they go after it unitedly and strongly enough they accomplish something. A man necessarily is a politician, more or less, or he wouldn't be representing us in Congress or in the United States Senate. Politicians like public favor. We are conceited enough to know that there is no body of men that can mould public opinion more than the combined activities of the doctors of the State of Kentucky, with the people of the State of Kentucky. The politicians know that, gentlemen. Doctors have a way of getting around. You don't find politicians overlooking the doctors, because they know they get around. However we approach this matter, the fact remains that we should approach it. It may be better to defer this to our last meeting day and let us think it over and submit it to the Public Relations Committee.

My suggestion would be that we don't stay here all night, but that we all do some thinking. In this connection I believe that there would be no harm at all, and I think there would be much good accomplished, if every doctor in this House would not only think about it, but confer with his friends back home, if we would all go back to our communities and talk with the other doctors in our county societies, if each one of us would write a letter to our Congressman and our Senator. In the meantime, we are still open for further discussion.

J. A. Orr, Paris: It seems to me that this body is of one mind in regard to this thing, and I don't see why we couldn't go on record right now and have a vote recording our sentiments in regard to this thing, instead of waiting until the last session. I think Dr. Miller's suggestion, if he made it in the form of a motion, is excellent. I think that we should instruct our Public Relations Committee to communicate with our Congressmen and advise them that the Kentucky State Medical Association is against this bill, and I think we might as well do it now as any other time.

I therefore move you, sir, that our Public Relations Committee be instructed to advise our Senators and Congressmen that the Kentucky State Medical Association is opposed to this bill.

The motion was seconded.

Irvin Abell: Mr. President, I am not a member of the House of Delegates. I am only here by your sufferance as one of your Past Presidents. I am quite thoroughly in accord with what Dr. Orr has said, but I do think it would be well worth while if we could have a special committee to draw up suitable resolutions which would express definitely and positively our convictions and our wishes in so far as our representatives in the Senate and Congress are concerned, and that those resolutions, if concurred in by the members of the House of Delegates, be sent to each of our Representatives and Senators with a letter from the Public Relations Committee. That would be my suggestion. (Applause.)

J. A. Orr: I incorporate that suggestion in my motion and move that we appoint such a committee.

E. L. Henderson: You know, gentlemen, the difficuulty is that we do not have adequate medical service for all the people of this country. Now, we would have or we could have adequate medical service if we had the proper distribution in normal times of the doctors of this country; but we all know that there are counties in this state that do not have adequate medical service. Take Breathitt County, for instance. There are two doctors for 25,000 people. You all know that that isn't adequate medical service. Two doctors cannot supply adequate medical service to that many people.

The trouble in Washington is they realize that the country as a whole is not being taken care of from a health standpoint. It is up to the medical profession to develop the leadership to supply the proper medical service to the entire nation. I don't know how that could be done. You can't send a man to any section of this country if he cannot be paid adequately for his service. It seems to me that the time is coming when we are probably going to have to accept some governmental grant, if necessary, to supply these people with adequate medical service. These people should have hospital facilities within reasonable reach, where they could be taken to the hospital. They should have clinical facilities, if necessary, to establish a clinic somewhere in the community

where they could get proper service. Until we develop adequate leadership and supply these people with medical service. we are going to have agitation in Washington by the various uplift or reform people. A lot of this trouble is on our own shoulders; a lot of it is being agitated because we haven't developed the proper leadership. How that can be done I don't know, but it is up to us to get busy and develop the proper leadership in order to supply the adequate medical service to the entire country.

As I said a few minutes ago, this problem is your problem; it isn't the problem of any specific committee or any organization; it is the problem of the individual doctors all over this country. This bill must be defeated. Unless it is defeated we are all going to be working on a salary or we will step out, but at the same time we must be thinking about developing medical service for all the people of the country.

PRESIDENT HOWARD: Dr. Orr, will you please state your motion again?

J. A. ORR: I move you, sir, that the President appoint a committee to draw up resolutions stating that the Kentucky State Medical Association is opposed to this bill in Congress, and forward them to the Senators and Congressmen, in cooperation with our Public Relations Committee.

The motion was seconded.

PRESIDENT HOWARD: Gentlemen, is there any further discussion on this motion?

PRESIDENT HOWARD: You have heard the motion. All in favor let it be known by saying "aye"; opposed. Carried.

J. W. SCOTT: I move the vote be unanimous.

PRESIDENT HOWARD: Dr. Scott moves that it be unanimous.

The motion was seconded.

PRESIDENT HOWARD: Anybody opposed to this motion stand up. It is unanimous.

I will appoint that committee now so that the resolutions can be duly prepared and presented to the House meeting Wednesday morning at eight o'clock. I think that we have three gentlemen on the stage who can take care of that matter. I will appoint Drs. Oscar Miller as Chairman, Irvin Abell, and P. E. Blackerby, to help him draw up those resolutions.

C. C. HOWARD, Glasgow: We have a bill proposed from one member of our committee that we are studying seriously that we hope, if it developes, will solve some of these problems. It takes time to study these bills and to know how to approach them. We are making a serious study of that, and we have called a meeting. Later, after we have really developed it, we want to present it to this body. We did not present it at this meeting because we had something else on our minds that we thought was more pressing. We have learned through bitter experience not to carry too many eggs in the basket at the same time.

I am thoroughly convinced that we will have to do something about this or we are going to lose all our power just fighting something.

Another thing of which I am thoroughly convinced is that this setup that we have at the present in Chicago, the committees and all, is excellent, and they are excellent men, but they represent only the cities, and 90 per cent of this trouble, or 80 per cent, is rural. I as sure there should be rural men on these committees and we will have to learn to function with other people on the committees. We as doctors have never learned that, because we have always been giving orders ourselves so much that we haven't got over the habit. We will have to take into consideration the citizens, and they will have to be found on our committees; and the press. If I were going to set up a committee that would help solve something out in the country, I would take a good citizen—he wouldn't have to be a university graduate, but a good substantial citizen, a man or a woman. I have often thought about the term "medical economics." It is a high-sounding word which I never have liked, and it doesn't mean much to me, but "medical" means the care of my family by a good family doctor, and I would take a doctor like old Dr. Owen, and I would take my mother who reared six children with a little farm and one cheese apple tree. We had eaten those apples so long, it seemed to me, that when she was away for a few days I took my brother out and we consulted as to whether or not we would cut it down. I can see that tree now; it was the finest cheese apple tree in Metcalfe County. And finally he said, "Clark, if we cut it down we might starve," and we didn't cut it down. He was the economist. And Uncle Tom Barton; I'd put him on the board, because he was a farmer and didn't have a high education. I remember well that we had a university man who came down and

boarded at Uncle Tom's, and he took it on himself that he was going to educate Uncle Tom, and he set aside Thursday night, and every Thursday night he was going to give him a good education. Now, Uncle Tom had already reached the degree that he was very successful, he had a nice farm, he had fat horses, and he had money. He appeared at church every Sunday with his grosgrain black and his jean "britches" on, and he was a respectable citizen. But this university man was going to educate him, so they carried it on for two or three weeks, and finally Uncle Tom said to him one night, "Professor, I believe that if it is agreeable to you we will just stop this."

"What's the matter, Uncle Tom?"

"Well, you know, Professor, I'm afraid you're going to clutter up my mind."

Uncle Tom had attained his education and was afraid of too many theories.

I used to sit, when I was a child, and hear my mother read the Glasgow Times every Thursday by the coal oil lamp, and she always read the editorials. The editor was an old Southern gentleman who always had an editorial on some public issue, and it was so good that it was worth reading. The country editor is still a great factor in the communities.

If we could go back and consolidate our committees with Uncle Tom Barton and Dr. Owen and Jim Winston and my mother, we might work out this medical care. But I doubt if we will ever work it out with the superlative degree of men who maybe don't live out there enough and haven't enough mud on their shoes. We will have to approach this thing workably or somebody is going to cram something down our throats that we don't want. I don't want this bill and you don't either, but we are going to get this bill or something worse if we don't offer something that is as good or approaches it. We might as well make up our minds.

G. Y. Graves, Bowling Green: We have been talking about this bill quite a lot. I think the proof of the pudding is in the eating, and I think the medical care we have is at least better than any other medical care in the world. I have had an opportunity to practice medicine in Kentucky and I can tell you now that our medical care is superior. I think that we should start an educational campaign to show these people these facts. This false system of socialistic medicine has never worked anywhere successfully and it is never going to work here. I think we must adopt a more belligerent attitude. It is not enough to say that we are against this, but we must show them why we are against it; we must show them where our present system works better than this one that they are trying to put over, and we must mend our own fences in the places that are weak. These communities that have insufficient medical care must be taken care of. It seems to me instead of apologizing for what we have done, we ought to be proud. No man in Washington can tell the best way to treat a person down in some of the hollows of Kentucky; it just can't be done. No man is big enough to solve this whole system. We must show them that we are giving good service. I think it is not enough to express our opposition to this, but we have to appoint another board to educate the people. Let's kill this bill and then get busy and educate the people to what we are doing and try to mend our own present system.

O. O. Miller, Louisville: I move we adjourn.

The motion was seconded and carried, and the meeting adjourned at 10:45 p. m.

FOURTH SESSION

Wednesday Morning Session

October 6, 1943

The final session of the House of Delegates convened at 8:10 a. m., President V. A. Stilley, Benton, presiding.

President Stilley: The House of Delegates of the Kentucky State Medical Association will be in order.

We will have the roll call by the Secretary.

The Secretary, P. E. Blackerby, called the roll and a quorum was present.

President Stilley: May we have the report of the Committee on Credentials?

Report of Committee on Credentials

J. Sam Brown, Ghent: All Delegates are accredited. I move that the report of the Committee on Credentials be accepted.

The motion was seconded and carried.

President Stilley: The next item is the election of officers, and nominations are in order for President Elect.

Election of Officers:

James S. Lutz, Louisville: Our delegation from Louisville had a meeting and we unanimously decided we would like to have Dr. Oscar Miller.

The nomination was seconded by Dr. Karl D. Winter, Louisville.

Carl Norfleet, Somerset: I move the nominations be closed.

The motion was seconded by J. I. Greenwell, New Haven.

PRESIDENT STILLEY: Dr. Miller has been nominated and a motion has been made and seconded that nominations close. All in favor of closing the nominations and electing Dr. Miller make it known by say- "aye"; contrary "no." Carried.

C. A. VANCE, Lexington: I move you that the Secretary cast the ballot for the election of President Elect.

The motion was seconded by C. B. Johnson, Russell, and carried.

PRESIDENT STILLEY: The motion is carried and the Secretary is instructed to cast a ballot.

The Secretary cast the ballot.

PRESIDENT STILLEY: For President Elect, Oscar Miller, and we will appoint C. A. Vance and Frank Boyd to bring Dr. Miller in.

While we are waiting to find Dr. Miller, it has been the custom always to elect three Vice Presidents, not First, Second and Third, but three Vice Presidents, one from the western part of the state, one from the central and one from the eastern part of the state. We will hear nominations for the western part of the state.

JOHN G. SAMUELS, Hickman: I nominate Dr. Herbert Hunt, of Mayfield.

W. B. ATKINSON, Campbellsville: That is out of order because he is a delegate and can't be elected.

JOHN W. SCOTT, Lexington: Mr. President, is that a fact, because of course it applies to the presidency, but I didn't know that it applied to any other office of the Association.

W. B. ATKINSON: I have just been reading it in the Constitution, that no member of the House, no delegate, can be elected an officer of the Association, except a Councilor.

T. ATCHISON FRAZER, Marion: I move you we suspend the rules by unanimous consent and elect Dr. Hunt as Vice President.

W. B. ATKINSON: You have got a constitution; you'd better stick to it.

PRESIDENT STILLEY: Inasmuch as there is a provision in the Constitution we will have to adhere to that as nearly as we can. I think everybody in the House wants Dr. Hunt.

CLARK BAILEY, Harlan: I make a suggestion that Dr. Hunt resign as a Delegate to the House.

CARL NORFLEET: Mr. President, it seems to me it would be an act of modesty for Dr. Hunt to remain because it looks like he was bidding for the job if he resigns.

SECRETARY BLACKERBY: Some of you who have served as Presidents of this Association ought to be in position to best interpret your By-laws and Constitution.

PRESIDENT STILLEY: Dr. Howard and Dr. Gardner, I am going to have to have some advice.

T. A. FRAZER: There is no question about suspending the rules if there is no objection. If somebody in here is unfair enough to object, that will block the game.

E. M. HOWARD, Harlan: Why not put the question to the House and see if they want to waive the rule. It may be that they will be unanimously in favor of it.

PRESIDENT STILLEY: There is a motion before the House that we suspend the rules.

The motion was seconded.

J. A. ORR, Paris: Mr. Chairman, it is perfectly within the rules of parliamentary procedure to suspend the rules, but it is impossible to suspend a section of the Constitution. I think that is entirely out of order.

J. W. SCOTT: The objection isn't established as a matter of fact so far.

PRESIDENT STILLEY: Are there any other nominations for Vice President for Western Kentucky?

J. KENNETH HUTCHERSON, Louisville: I nominate Dr. Earl Blair of Brandenburg.

J. W. SCOTT: We have just discovered over here Article VIII, Section I: "The officers of this Association shall be a President, President-Elect, three Vice Presidents, a Secretary, a Treasurer, and eleven Councilors.

"Section 2: "The President-Elect and the Vice Presidents shall be elected for a term of one year. The Secretary, Treasurer and Councilors shall be elected for terms of five years each; the Councilors being divided into classes," and so forth. "All these officers shall serve until their successors have been elected and installed."

Then Section 3: "The officers of the Association shall be elected by the House of Delegates on the last day of the Annual Session, but no Delegates shall be eligible to any office named in the preceding section, except that of Councilor, and no person shall be elected to any such office who is not in attendance upon the Annual Session, and who has not been a member of the Association for the past two years."

That is the Constitution. I submit with

Dr. Atkinson that we can't set aside the Constitution quite as informally as that.

J. I. GREENWELL, New Haven: I would like to second the nomination of Dr. Blair.

PRESIDENT STILLEY: Dr. Blair of Brandenburg has been nominated.

W. B. ATKINSON: I rise to another point of order. Has Dr. Blair been at the Session?

SECRETARY BLACKERBY: I am sure that he hasn't. We can see if he is registered.

Meanwhile, we can go to the other sections while we are waiting.

PRESIDENT STILLEY: Who was it wanted Eastern Kentucky?

SMITHFIELD KEFFER, Grayson: I want to nominate my friend and neighbor, J. W. Stovall, a man who has done more for the people of our county than any man living or dead. We ask every surgeon and every general practitioner to vote for him. His father before him was a mighty fine old gentleman, and he has passed to his reward, and we are running the J. W. Stovall Memorial Sanitarium in his memory up there. We think a lot of Dr. Stovall, and if you fellows knew him as well as I do you would too. Therefore, gentlemen, I expect every one of you to vote for him.

C. A. VANCE: I second the nomination.

H. H. HUNT, Mayfield: I wish to second the nomination and move that nominations close and the Secretary cast a ballot.

SMITHFIELD KEFFER: I will second that motion, too.

PRESIDENT STILLEY: A motion is made and seconded that G. Watt Stovall be elected Vice President, and a motion is made that the rules be suspended and he be elected by the Secretary casting a ballot. All in favor of that make it known by saying "aye"; opposed "no." Carried.

The Secretary cast a ballot.

PRESIDENT STILLEY: J. Watt Stovall is elected Vice President.

Nominations are now in order for Central Kentucky.

LYTLE ATHERTON, Louisville: I would like to nominate James H. Pritchett of Louisville.

W. E. GARDNER, Louisville: I second the nomination.

H. H. HUNT, Mayfield: I move nominations be closed and the Secretary cast a ballot.

The motion was seconded by Carl Norfleet, Somerset, and carried, and the Secretary cast a ballot.

PRESIDENT STILLEY: James H. Pritchett is duly elected.

JOHN G. SAMUELS, Hickman: Due to the confusion about Dr. Hunt as a Delegate, I would like to withdraw that nomination and place in nomination the name of Dr. Will Fuller.

H. H. HUNT: I second the nomination.

PRESIDENT STILLEY: Will Fuller has been nominated for Vice President from Western Kentucky. Are there any other nominations?

H. H. HUNT: I make a motion nominations close and the Secretary cast a ballot. (Seconded)

PRESIDENT STILLEY: They say Dr. Blair is not registered.

J. B. HUTCHERSON: I withdraw the nomination.

PRESIDENT STILLEY: A motion is made that Dr. Will Fuller be elected by the Secretary casting a ballot. All in favor make it known by saying "aye"; contrary. The motion is carried, the Secretary has cast a ballot, and Dr. Will Fuller of Mayfield has been elected Vice President.

The next officer to be elected is Secretary of the State Medical Association. If you remember, just immediately after Dr. McCormack's death the Council elected Dr. Blackerby to fill the unexpired term of Dr. McCormack, which expires at this meeting, and it was unanimously approved by the Council. Now is the time that we elect a Secretary for the State Medical Association.

H. H. HUNT: I think any society is fortunate indeed to have a man in the community available for the job of Secretary of our State Association. I want to place in nomination P. E. Blackerby as Secretary.

The nomination was seconded by Dr. Johnson and many others.

L. S. HAYES, Louisa: I move the nominations be closed and the President cast a ballot.

The motion was seconded by J. I. Greenwell and carried and the President cast a ballot.

PRESIDENT STILLEY: P. E. Blackerby is elected Secretary of the Kentucky Medical Association. (Applause.)

SECRETARY BLACKERBY: Members of the House of Delegates and Council and Officers of the Association: It is difficult for one to express himself as he would like in the presence of those who have demonstrated such cordial friendship, and I hold friendship as dear as anything in the world. It is an embarrassing situation, of course, for me. You have given me your

confidence in electing me as Secretary of the Association, and I am conscious of the fact that you have had a Secretary for so long who has given, along with your officers, a leadership to this Association second to none in the country.

I accept this with a great deal of humility. I come from a family of doctors. I love the ethics of my profession. I have no ambition personally at all. I have only a desire to serve all of you the best I know how. (Applause).

PRESIDENT STILLEY: The next order of business is election of a Councilor from the First District to succeed V. A. Stilley, whose term expires at this time.

H. H. HUNT: In Marion County they raise the very best, and I believe that seniority is priority, and I want to nominate, and I know he will be elected by acclamation, T. A. Frazer.

The nomination was seconded by George H. Wilson, Lexington.

FRANK BOYD, Paducah: I move the nominations close and the Secretary cast a ballot.

The motion was seconded by Smithfield Keffer, Grayson, and carried and the Secretary cast a ballot.

PRESIDENT STILLEY: T. Atchison Frazer is elected Councilor for the First District.

SECRETARY BLACKERBY: I have just been reminded that the term of your Treasurer expires this year, A. W. Davis.

E. M. HOWARD, Harlan: I would like to nominate Dr. Davis to succeed himself as Treasurer.

The nomination was seconded by Dr. Johnson.

JAMES S. LUTZ, Louisville: I move the nominations be closed and the Secretary cast the ballot.

The motion was seconded and carried and the Secretary cast the ballot.

PRESIDENT STILLEY: Dr. A. W. Davis, of Madisonville is elected Treasurer.

Next is the election of an Orator in Medicine.

W. E. GARDNER, Louisville: I would like to place in nomination an outstanding young internist of Louisville whom we all know, and I am sure would write a creditable oration, Frederick G. Speidel.

The nomination was seconded by James S. Lutz, Louisville.

J. S. LUTZ: I move the nominations be closed and the Secretary cast a ballot.

The motion was seconded and carried and the Secretary cast a ballot.

PRESIDENT STILLEY: Frederick G. Speidel has been elected Orator in Medicine.

Nominations are in order for Orator in Surgery.

J. A. ORR, Paris: I would like to place in nomination for Orator in Surgery, one of the outstanding younger surgeons of Kentucky, one who has always been a close student of his profession, one who has always practiced his profession as it should be practiced, one who has always upheld the character and dignity of his profession on every occasion, one whom Central Kentucky will be proud to have represented, and one whom the State Association will be proud to have honored. I should like to place in nomination for Orator in Surgery J. Farra Van Meter, of Lexington, Kentucky.

CARL NORFLEET, Somerset: I would like to second the nomination and move that nominations close and the Secretary cast a ballot.

The motion was seconded by Smithfield Keffer, Grayson.

JOHN W. SCOTT, Lexington: I am all in favor of Dr. Van Meter's election and I wish to make an additional second. I think he is highly worthy of it. I do, however, think that this idea that as soon as a man is nominated the Chair hears a motion to close the nomination is rather bad practice. I think there ought to be abundant opportunity for this House to express itself and make any nominations it chooses. Then if there is no second nomination made, I think it is proper to proceed. I think that is a little bit of a steam roller method. I am for Dr. Van Meter's election.

E. M. HOWARD, Harlan: Question.

PRESIDENT STILLEY: There is a motion before the House that Dr. Van Meter be elected Orator in Surgery, and a motion is before the House that the Secretary be instructed to cast a ballot. All in favor of the motion make it known by saying "aye;" contrary. It is carried.

The Secretary cast a ballot.

PRESIDENT STILLEY: Dr. Van Meter is elected.

C. A. VANCE: Isn't another Councilor to be elected? I thought there were two each year.

SECRETARY BLACKERBY: According to the record there is just one that I can find.

PRESIDENT STILLEY: The next order of business is the selection of a place of meeting for next year, 1944.

SELECTION OF 1944 MEETING PLACE

SAM C. SMITH, Ashland: I move that in case the war continues the meeting be

held in Louisville, Kentucky; in case it should end prior to that time, that the Council be authorized to select the time and place of meeting.

The motion was seconded by G. Y. Graves, Bowling Green.

W. E. GARDNER, Louisville: I move that the Association accept Dr. Smith's invitation to meet in Louisville next year.

PRESIDENT STILLEY: Are there any other nominations? If not, are you ready for the question? All in favor of Dr. Smith's motion make it known by saying "aye"; opposed. It is carried.

SECRETARY BLACKERBY: I ask your indulgence. I have not sat in on and had anything to do with the proceedings of the House of Delegates in the matter of election of officers and so forth, and I owe an apology to all of you for overlooking the fact that there is a Delegate to the American Medical Association to be elected. Heretofore we have had three Delegates to the American Medical Association. The term of one has expired with this meeting; the other member has died. J. B. Lukins is a continuing member until his term expires. Dr. McCormack died, and Virgil Simpson's term of office expired. Under the new allotment there can be only two Delegates to the American Medical Association. You have one, Dr. Lukins. You have one to elect.

J. S. LUTZ: It is for an unexpired term, isn't it?

SECRETARY BLACKERBY: No, it is for a full term.

J. W. SCOTT: I want to nominate Dr. Simpson to succeed himself as Delegate to the American Medical Association. I think all of us who heard his report on Monday and have heard his other reports realize that no delegate has ever brought back to this Association as clear and correct an account of the doings of the American Medical Association as has Dr. Simpson. I therefore nominate Dr. Simpson to succeed himself.

The nomination was seconded by G. Y. Graves, Bowling Green, and George H. Wilson, Lexington.

SMITHFIELD KEFFER, Grayson: I want to let Eastern Kentucky say that it also seconds that nomination of Dr. Simpson. I listened to part of his report, and I know he filed a much better one than I would have, and I think when we have a man seasoned like Dr. Simpson we ought to use him.

HENRY C. HERRMANN, Louisville: I move that the nominations close and the Secretary cast a ballot.

The motion was seconded and carried, and the ballot was cast.

PRESIDENT STILLEY: Dr. Simpson is elected Delegate to the A.M.A. to succeed himself.

Gentlemen, it is with a great deal of pleasure that I present Dr. Miller to you as President Elect of the Kentucky State Medical Association. (Applause.)

O. O. MILLER, Louisville: Gentlemen, I desire to thank you for this very great honor. It is an honor that any man might justifiably aspire to. I can assure you I did not seek it. It is an honor, though, that I had hoped might come to me some day.

I know that many had come to their full stature of usefulness to this Association under the aegis of Arthur T. McCormack. I had really hoped that I might serve under him and with his assistance. Notwithstanding this, you have a splendid record of Past Presidents who have served this Association and set a high-water mark of achievement, and I hope with their assistance and guidance and with this splendid gentleman who represents you at the moment and typifies the best in medicine, a country practitioner and God's gentleman, though it is a difficult position for one to fill, yet I assure you that with your assistance I will render every service to this Association.

It is given to few men to bring luster to the office. The least we can expect, however, is that they shall not tarnish it, and I beseech of you your support in the years to come. Thank you very much. (Applause.)

SECRETARY BLACKERBY: Gentlemen, I believe there are some resolutions, and I see the Chairman of the Resolutions Committee is here. Dr. Miller as Chairman of the special committee drawing this resolution asked me to present it to the Chairman of the Resolutions Committee and he asked me to read it.

RESOLUTIONS

"WHEREAS, There has been introduced in the Congress of the United States a bill, Senate Bill 1161, House Resolution 2861, known as the Wagner-Murray-Dingell Bill, adding to and extending Social Security legislation, and

"WHEREAS, This bill in part is intended to provide Federal control of medical and hospital services for all citizens earning $3,000 or less, which constitutes 93 per

cent of the population, and

"WHEREAS, This nation was founded on free enterprise and an opportunity for one to pursue his life's work stimulated by the ideals and ethics that dominate a profession devoted to the service of mankind, and

"WHEREAS, Approximately one-third of the physicians of our country, together with many other patriotic men and women whose interests are affected and who because of these circumstances are not permitted to give expression to their wishes in regard to such legislation, and

"WHEREAS, The general death rate in 1942 was the lowest on record and the maternal and infancy rate has continued to decline in recent years, in the face of the stress of war, indicating that the medical profession is always prepared to rise to any emergency and fulfill its responsibility to the people, and

"WHEREAS, In the judgment of a great majority of our physicians who are now extending their every effort to safeguard the health and lives of our civilian population, this legislation would result in the distribution of a medical service of inferior quality, and

"WHEREAS, Senate Bill 1161 would create a class of political doctors subject to the influence of political practice and seeking emoluments and avoiding burdens, becoming a menace both to the patient and to the public, now therefore be it

"RESOLVED, That the State Medical Association of Kentucky in convention assembled does protest the passage of this bill and calls upon our Senators and Representatives in Congress to do their utmost to defeat it.

Oscar Miller, Chairman
Irvin Abell
P. E. Blackerby,
Special Committee."

T. ATCHISON FRAZER: I move the adoption of the resolution unanimously.

J. W. SCOTT: I move the resolution be accepted as written. The motion before the House, as I understand it, is to adopt this resolution, and I second that. There is no other motion before the House.

J. S. LUTZ: I didn't hear the resolution that it is to be forwarded to all of our Senators and Representatives. I move you that be done.

SECRETARY BLACKERBY: That motion was made the other night, I believe. Dr. Orr made that motion. Mr. Chairman, I believe it was to be published in the papers of the state.

PRESIDENT STILLEY: The motion before the House is that the House of Delegates adopt this unanimously. All in favor of that make it known by standing; opposed. It is carried unanimously.

G. S. BUTTORFF, Louisville: I assume that a copy of that, or at least information that the House of Delegates went on record as unanimously opposed to it, will be given to the newspapers also.

SECRETARY BLACKERBY: That was in Dr. Orr's motion the other night.

H. G. REYNOLDS, Paducah: Due to the fact that there is a possibility that many of the doctors of the state might not see this paper, don't you think it would be a good idea that a copy of this resolution, or at least some suggestion as to the wording of the letters or the telegram that they send to their Senators, be sent to them in an advisory way? They can make it a telegram or letter or whatever they please, but I would suggest that the various representatives be sent a copy of this, or some instructions.

SECRETARY BLACKERBY: It is suggested that the Council have this mimeographed and sent to every doctor a member of the Association in Kentucky, with the request that they communicate immediately with their Senators and Representatives, and it will be published in the Journal, and according to the instructions the other night, it will be given to the press throughout the state. If there is no objection to that, Mr. Chairman, I will do that.

O. O. MILLER: I would suggest that since doctors are not very politically minded, the list of Representatives be enclosed in the letter.

E. M. HOWARD: You know there are sins of omission and sins of commission. If we take this matter lightly and don't do something about the sin of omission, the fact that we pass these resolutions and that our Senators and Representatives in Washington get them won't have as much bearing as for each of you and the other doctors to go home and take it up with the men that you know personally. Practically every man in the state, or most of them, will know his Congressman personally. A personal letter will mean a lot more to him. The same with your Senators.

What I got up here for was to say something about the State Tuberculosis Sanitarium. Most of you, no doubt, last night

were at the meeting and heard the Governor, and you heard what he said in very few words about the unwarranted attack against him for not having proper medical advice before they started building a new addition to Hazelwood Sanitarium. Gentlemen, after all the years that we have tried to do something, and after concentrating on the thing and actually accomplishing the thing, and after all the best advice that we could get from our committees and the doctors in the state and the doctors in the City of Louisville who spent a lot of time on that matter and advised with the Governor—they didn't advise him; they implored him and persuaded him, and finally got him to reach the conclusion that out of his emergency fund he should make this appropriation—I think it would be very unkind if we should overlook the fact and not say something about that matter. Therefore, we drew up these resolutions to present. As Chairman of the Resolutions Committee, will you read them, please?

H. G. Reynolds: You are familiar with them; suppose you read them.

E. M. Howard: "Whereas, There seems some misunderstanding on the part of the public resulting from press notices regarding the development of the program for increased facilities at the State Tuberculosis Sanatorium at Hazelwood through the construction of a new building for 230 additional beds, therefore be it

"Resolved, That the House of Delegates of the State Medical Association extend to Governor Johnson our complete approval of his program for this great humanitarian institution and our deep appreciation of his official acts on behalf of the unfortunates in Kentucky suffering from tuberculosis."

C. A. Vance: I move the adoption of that.

J. S. Lutz: I second it.

President Stilley: All in favor of the motion to adopt the resolution make it known by saying "aye"; contrary "no." It is adopted.

Are there any other resolutions to be presented?

Carl Norfleet, Somerset: I want to offer a suggestion, that not only publication of the resolution regarding the Wagner Bill be made in the state papers, but as far as I am concerned I am going to see that that is published in our county papers.

Secretary Blackerby: We are going to send it to every editor of every paper. Whether they will all publish it or not, you never know.

H. G. Reynolds: I have a resolution here presented by Dr. Scott:

"Whereas, The Louisville hospitals at the request of the Jefferson County Medical Society organized Community Hospital Service in 1938, for the purpose of providing hospital care on a non-profit, budget basis to citizens of Jefferson County, and

"Whereas, Community Hospital Service is now extending its benefits to citizens outside of Jefferson County and therefore desires the approval of the Kentucky State Medical Association and also desires that the Association be represented on its Board of Trustees, be it therefore

"Resolved, That the Kentucky State Medical Association approve Community Hospital Service and nominate one of the Association members to serve on the Board of Trustees of Community Hospital Service."

Here is a supplement, rather an addition by Dr. Scott: "This member shall be responsible to the Association that the ethical standards set by the American Medical Association are maintained."

I move the adoption of the resolution.

The motion was seconded and carried.

Secretary Blackerby: I have an announcement to make. I just received a message that Dr. Virgil Kinnaird, a long-time member of your Council, on his way to Louisville yesterday was taken ill, and the report this morning is that he was operated on for appendicitis in the hospital at Danville, and that he is doing well, and he sends his love to every member of this organization.

J. S. Lutz: I move the Secretary be instructed to send a telegram to Dr. Kinnaird.

Secretary Blackerby: I wonder if it would be satisfactory to Dr. Lutz and the rest of you for the Chairman of the Council to call over the phone this morning; he is going to do that anyhow, and then I will send the telegram as you suggest. (Agreed.)

E. M. Howard: It has been suggested by Dr. Stacy that in addition to the resolution I read it might be well for this House to go on record as commending the Governor for his action in rehabilitating and improving the state institutions. I think it is well in order. I would like to hear the advice of somebody who has had more

experience on that, but I believe the Governor is in sympathy with the work throughout the state and has shown conclusively that he will be for it after he isn't Governor; he just feels for it, and he has shown by his action that he is deeply interested, and nothing speaks better, gentlemen, than action.

I think it would be timely that we should express the feeling of this House of Delegates in behalf of our Association and in behalf of the people of the State of Kentucky for the good work he has done and is now doing and is planning to have done right along.

J. A. Orr: Didn't the resolution do that?

E. M. Howard: If it meets with the approval of the House, we will amend the resolution and tack that onto the end of it. I will ask Dr. Miller to assist in preparing the resolution.

President Stilley: If it is agreeable to the House that can be done.

W. E. Gary, Hopkinsville: I think it would be advisable to add to that resolution something to bring out the fact that he did have the advice from the State Medical Society. I think that ought to be brought out.

W. E. Gardner, Louisville: In reference to Dr. Howard's suggestion about the improvement of the hospitals for the mentally ill, and so forth, those of you who were present will recall in the closing paragraph of my report I laid special stress on the interest and time which he devoted to the problem, and my report was approved by the House of Delegates.

C. A. Vance: This is a special letter.

W. E. Gardner: Do you want to incorporate that in this same resolution?

E. M. Howard: However the House wants to do it.

W. E. Gardner: If you want to do it and incorporate that in the same resolution with tuberculosis, it could be done, but of course the newspapers yesterday gave some publicity to my report commending him for his tremendous interest, and so forth, in the improvement of the hospitals for the mentally ill. I don't know whether we want to duplicate that. I have no objection.

C. A. Vance: He will never see that report.

W. E. Gardner: I will send him a copy of it. Somebody else made the suggestion that in this other resolution about Hazelwood something ought to be said about the fact that he did seek advice.

W. E. Gary: That is already in the resolution that has been read.

W. E. Gardner: Was that in the resolution, that he sought advice?

Secretary Blackerby: No, the resolution didn't say that. If it is your wish I will be glad to incorporate it in there, that he did seek the advice through Dr. McCormack, the State Health Commissioner, and Dr. McCormack was in frequent conference with Dr. Hilleboe, who is the Federal representative throughout the country for the control of tuberculosis.

E. M. Howard: There are so many of these committees, we had reports all day yesterday, and still we don't know what they are all about because they come along routinely; but this Advisory Committee of which Dr. Gardner is Chairman advises the Governor; the Governor doesn't act on these things without having their advice; every time they make a new addition to a building they lay the plan. Our doctors, Drs. Irvin Abell, Gardner, and other doctors throughout the state are on this committee and they have advised the Governor regularly and consistently, and then he has had advice besides that. I believe it would be well enough to add about the regular committee being appointed for that purpose.

J. A. Orr: It seems to me the resolution that has just been adopted covers all that. I don't see why any Governor who reads that resolution wouldn't understand that this House of Delegates approves his actions and is perfectly in accord with all he has done. I don't see how you could express it any better. It has already been expressed. It seems to me it would be superfluous to add other things.

W. E. Gardner: Except it didn't say he sought impartial advice about Hazelwood. I wonder if that should be inserted.

President Stilley: That was not in the resolution. You have heard the suggestion of Dr. Howard that that be incorporated in the resolution. What is your pleasure, gentlemen?

C. A. Vance: I move it be placed in the resolution.

The motion was seconded by L. S. Hayes, Louisa, and carried.

Secretary Blackerby: There is one other resolution. I have just explained that Dr. Abell's recommendation the other day with regard to the constitutional amendment was adopted by the House, and it was asked that that be put in the form of a resolution.

H. G. Reynolds: "Whereas, The present Constitutional limitation on salaries of all public officials in Kentucky, except that of the Governor, imposes a definite handicap upon the progress and development of the Commonwealth, and

"Whereas, The electorate of the State will on November 2, 1943, at the regular election, have the opportunity to authorize the removal of this impediment, now therefore be it

"Resolved, That the Kentucky State Medical Association hereby registers its unqualified approval of the proposed amendment to the organic law of the State, removing the limitation on salaries of public officials, and urges its members to exert their influence and effort toward inducing the electorate to vote 'Yes' on this amendment."

C. B. Johnson: I move its adoption.

The motion was seconded by Dr. Scott and carried.

Clark Bailey, Harlan: I make a motion that we extend our thanks for the courtesy shown to us and for the successful meeting, to the Brown Hotel, to the press, to the Jefferson County Medical Society, and to E. M. Howard.

President Stilley: I amend that to read "the Big Chief, Murph Howard." You have heard the motion. All in favor say "aye"; opposed. Carried.

Secretary Blackerby: There are four Standing Committees, and I don't know whether their term of office extends beyond each year or not. Do any of you know?

W. E. Gardner: Doesn't the Council supply those vacancies?

Secretary Blackerby: It has on the agenda here, "Appointment of Permanent Committees."

C. A. Vance: The President appoints them.

Secretary Blackerby: The Committee on Scientific Work is always headed by your President Elect (that is Dr. Miller), and the Secretary and Treasurer are ex officio. It calls for two others. He can select his own two members.

J. W. Scott: The working member is named, I think, by Dr. Miller, who is Chairman of the Committee; he selects a so-called working member, and I don't believe the President has anything to do with it.

C. A. Vance: Dr. Norfleet feels that you should appoint a committee to write resolutions on the death of our former Secretary, from this House of Delegates. We have not taken any definite action on that. I believe that ought to be done, and I make that motion.

Secretary Blackerby: It provides for the publication of one issue of the Journal as a memorial, and there ought to be a resolution.

C. B. Johnson: I second the motion.

E. M. Howard: There are some other resolutions on that matter.

Secretary Blackerby: We have many county resolutions. This is a resolution for the state society.

President Stilley: You have heard the motion of Dr. Vance, which has been seconded.

Secretary Blackerby: Was that for a committee of three?

C. A. Vance: Yes, or whatever committee the President wants.

Secretary Blackerby: The President to name the committee?

C. A. Vance: Yes.

President Stilley: All in favor of that make it known by saying "aye"; and it is carried and I will appoint C. A. Vance Chairman, W. E. Gardner, and Oscar Miller as a committee of three to draw up the resolutions.

Secretary Blackerby: This doesn't say that these Standing Committees shall be elected by the House of Delegates, but they do have the Standing Committees and the Committee on Scientific Work and the Committee on Public Relations, the Committee on Arrangements (that is always, of course, the President of the host society) the Medico-Legal Committee, J. B. Lukins, Chairman, the Committee on Medical Education, Marion Beard, Chairman. Whether the House of Delegates wants to leave that to the President to select committees I don't know. It was on the agenda here, and that is why I call it to your attention.

W. B. Atkinson, Campbellsville: They always have been appointed by the President.

Secretary Blackerby: So far as I know they have. The President ought to be fortified by your consent in the matter since it is on the agenda.

W. E. Atkinson: I move you all committees that are necessary be appointed by the President.

The motion was seconded and carried.

Carl Norfleet: Again I want to offer a suggestion and make a motion, if necessary, that the report of these resolutions

be sent to each state medical society in the United States regarding this Wagner Bill; that the action this body has taken this morning be sent to each state society.

J. S. Lutz: I second that.

President Stilley: It is moved and seconded that copies of the resolutions as passed by this House be sent to each state medical society in the United States, and we can send them to the District of Columbia. All in favor of that make it known by saying "aye"; contrary "no". Carried. Is there any new business?

Secretary Blackerby: The Chairman has just asked me to announce that after the adjournment there will be in this room a meeting of the Council.

O. O. Miller, Louisville, took the Chair.

Charles F. Wood, Louisville: Either under the head of unfinished or new business I think should be brought before the House the question of what we are to do about our members in the armed services whose membership has been lost due to non-payment of their dues. This question was brought up Monday afternoon before a very small portion of the remaining delegates, and as I understood it at that time, it was placed on the table as unfinished business to be brought up before the House at this session.

I feel very strongly that these men who have gone into the armed services and are serving under the present emergency certainly should be retained in active membership in our State Medical Association. Apparently there is some By-law preventing the waiver of their dues which prevents the society from merely keeping them on the rolls without paying their dues. The other afternoon, apparently there was some objection to the idea that these men be carried, for two reasons. One was that some of the men felt that the men in the armed services did not want the charity of the organization and did not feel that the organization should pay their dues, and that the men wanted to pay their own dues. That objection, I think, can be obviously passed over, and it can be proved wrong by the fact that we have lost roughly ten per cent of our membership for these reasons. If these men wanted to pay their dues they would still be on the roll of active members. They apparently have not paid their dues, and consequently they have lost the rights and privileges of membership.

A suggestion was made, and I think it should be acted on, that the Treasurer of the State Association be empowered to provide funds to the individual counties for payment of the state dues of those members of those county societies in the armed services. That is a subterfuge, of course, to get around the By-laws, but to me it seems the most practical substitute that we can get, and to me it seems very important. All of you who heard the committee reports heard many of them urging that these men be retained in active membership. Therefore, I think that for a matter of facility, in order to keep these men in active membership, I believe it was you, Dr. Orr, who suggested that the State Treasurer lend the counties the money to pay these men's dues while they are in active service.

J. A. Orr: The motion that I made was that the State Society pay into each county society the amount sufficient to pay the dues of the men who are in the armed forces. This amount would immediately be returned to the State Society; as a matter of fact, it wouldn't cost the State Society a penny to do this. It seems the By-laws provide that each county shall send in the dues, and if they can't be paid any other way, according to the interpretation of it, I doubt the legality of the interpretation.

Secretary Blackerby: You don't mean to say that it wouldn't cost the State Association a penny.

J. A. Orr: All it would cost them would be to write a check to the county society and they would send the same amount right back to the state treasury in payment of these dues. If the state dues are five dollars and you send a check for five dollars to pay the dues.

Secretary Blackerby: Wait a minute. I am not arguing against it. I am only arguing on that particular point. The money that goes out of the State Society is money that the men have not paid in, so it is money in the treasury of the State Society that goes to the county. It does come back, but nothing offsets it.

J. A. Orr: It is offset by the same amount that comes back. You send a check for five dollars to Montgomery County or any other county to pay the dues of a man who is in the service and the secretary of that society immediately sends the money back to the state treasury.

Secretary Blackerby: That lapses the dues of the men, though; that is the only point I am trying to make.

J. A. Orr: It doesn't lapse the dues if it is sent in time, if it is sent before the first of April.

J. W. Scott: Of course, it wouldn't cost the Society anything if there were not members who were paying their dues. In other words, if there were 500 members in the armed services who were lapsing their dues, if those dues were sent to the county society and then sent back to the State Society, the budget would stand exactly where it was before, I take it, but a large number of those men are having their dues paid by the county societies. That would be lost.

Secretary Blackerby: That is the only point I was raising, whether this was intended to cover all of it for all of them.

J. W. Scott: I would like to make a motion. Is there a motion?

J. A. Orr: To pay the dues of those men who are in the armed service that are not paid by themselves or the county society.

Chairman Miller: Do you make that as a motion?

J. A. Orr: I make it. A motion was duly made and seconded the other day. Does that motion stand?

Secretary Blackerby: That is the point I want clear, only those who have not paid their dues.

J. A. Orr: I move you, then, in order to get around this clause in the By-laws, that the State Association pay to each county a sufficient amount of money to pay the dues of the men who are in the armed services whose dues have not been paid otherwise, either by themselves or the county society.

The motion was seconded.

Proctor Sparks, Ashland: That would be very unfair because it would be unfair to those who have already paid. I would suggest that each society carry the men in the services who are not paying dues. Some of them have started that already over the state.

C. B. Stacy, Pineville: I think each county society can handle that matter itself. Last year we lost one Delegate to the A.M.A. by not having enough members. If we can pull that up, there is no reason why each society can't take care of this itself.

J. W. Scott: I move a substitute to the motion, that the State Society pay to each county society an amount equal to the dues of the members in good standing who are now in service, provided they have not been notified by that society that it does not wish the dues of its members paid.

Now, in amplification of that, I would say that I feel confident that the Fayette County Medical Society, the Boyd County Medical Society, judging from what Dr. Sparks has said, the Christian County Medical Society, and no doubt others will notify the State Society that they will take care of that little matter themselves and don't want to have it put to the State Association, but it is foolish to say that any county society can take care of the thing itself. We have had counties reported here that have three or four members, two or three of whom are in the armed services. To ask one man remaining to pay the dues of three men is just too much, and those are in districts where the income is small relatively. I think that that takes care of the whole situation. It allows the State Society to take care of the members in the counties which are least able to take care of it themselves, and gives the counties which are able to take care of it themselves the opportunity to pay the dues for their members. I move that as a substitute.

J. A. Orr: I rise to a point of order. The amendment offered by Dr. Scott is the same substance as included in the motion. The motion provides to the effect that that same thing be done, only in a little different wording. It provides that they pay into the county society the dues that are not paid otherwise. If a county society determines that it will pay its own members' dues, that obviates the sending of any money.

Chairman Miller: I thought Dr. Scott's motion was a little different in that he said they would pay in the equivalent of the amount of money that each society paid in. If some society paid in fifty dollars for its members who are already in good standing, then the State Association would reimburse that society to the extent of fifty dollars to cover any delinquents that might be in there. Is that right?

J. W. Scott: No.

J. A. Orr: No, only those in the service.

C. B. Johnson: If that motion passes the State Society will pay the dues of every man who is in the armed forces.

J. A. Orr: Why shouldn't they?

C. B. Johnson: I think that is the obligation of the counties which the men are from. Most of the counties are perfectly able to pay the dues of the members in

the armed forces, and I think that they should be honored to have the pleasure to do so. Personally, from our county I don't want the State Medical Society to pay the dues of the men in our county, because our county can take care of it, but still, if you are going to pay the dues for Boyd County or Fayette County or Menifee County, we will feel that we should seek the same privilege from the State Society as any other county, and most medical societies will take that attitude. They will say, "Well, the State Society is not losing anything on it, but they are not gaining anything on it, just let them pay it." It will be just a loss to the State Society which I think the county societies could take care of themselves.

CLARK BAILEY, Harlan: Our State Society should pay for the dues of all of the men in the armed services. We owe that to them as our obligation. As I understand it, we are one of the very few states that does not do that. Since we can get around our By-laws and do that and maintain the membership of doctors who are giving their services to their country, that is our obligation to do that. I would like to see this brought to a close and see us unanimously go on record in that way.

CHAIRMAN MILLER: You have had two motions before the House.

PROCTOR SPARKS: You will pay them if you do as the motion is offered.

W. B. ATKINSON, Campbellsville: There will be one man who wears the uniform that the state will not pay dues for. I will promise you that. We are not subterfuging our Constitution and By-laws; we are throwing it out the window, because our State Society is made up of members of the county societies, and the State Society cannot tell any county society who shall be a member of that society at all. Anybody who is a member of the county society and pays five dollars is automatically a member. Now, when we pay five dollars for that, we are telling the county society whom it shall elect as a member and whom it shall not.

W. E. GARDNER: It said "in good standing."

W. B. ATKINSON: Also, there are a good many men in service who were spotty members of the county societies. There also have been men go in the armed forces who were never members of the county society.

J. W. SCOTT: The resolution said "those in good standing."

W. B. ATKINSON: Those fellows are doing just as much for their country as the other fellows. If that resolution should pass it is going to cost the State Society more money because we have got to put aside a few dollars for each of these five dollars for their medico-legal protection, also for the Journal, so if you are going to pass this thing you should increase the state dues to $7.50.

CLARK BAILEY, Harlan: I think the fact that the county society would remit the dues to the county members themselves would take care of that argument. I think that would answer his point. I don't believe there would be more than 20 per cent of the counties in the state that can take care of their members' dues, because we have so many counties that have from one to three members that can't take care of that many men in the armed services; it would be too big a burden. I would like to see us pass that motion.

J. A. ORR: It is not only a matter of whether or not the county society is able to take care of the dues. It is the sense of some county societies that this is a State Society affair and it is state dues, it is not a county society affair; each organization ought to stand on its own bottom and take care of its own members; it is not up to the county society to take care of the State Society members. The members who are in good standing in the county society are the ones; you won't be paying anybody else's dues who is not a member of the county society. If they are not in good standing in the county society they won't be paid for. All the men who are in the armed services in Bourbon County have had their dues remitted for the duration.

Dr. Scott's motion was re-read.

W. E. GARY, Hopkinsville: I think if we pass the resolution that the Secretary notify the secretary of each county what men are delinquent; then have that secretary notify the Secretary what they want to do about it within thirty days; then those that are not taken care of by the county or by themselves, be paid for as suggested by Dr. Orr, by refunding to the county that money.

SECRETARY BLACKERBY: Dr. Scott, do you catch that? I see what he means.

J. W. SCOTT: I think it would be all cleared by the addition of a phase there, "in good standing at the time of their entry into the service," because many of them have lapsed.

SECRETARY BLACKERBY: What I think he had in mind is that on the first of April each year the State Society knows the members who have not been paid up to that time, and it is his idea then that the Secretary of the State Association notify each county society; then the county society can make the claim for the state payment to that society in keeping with your motion.

J. W. SCOTT: Yes.

W. E. GARY: If they want it done.

J. W. SCOTT: It should be at the time, in good standing at the time they entered the service, because many of them have lapsed.

J. A. ORR: It doesn't make any difference whether they have lapsed or not.

SECRETARY BLACKERBY: They will have reinstated them by the first of April. They will have had to, and I think all you would need, if the substitute is going to be adopted, is that each society be notified by the Secretary as of the first of April in the succeeding year, those who are not members in good standing.

J. LELAND TANNER, Harrodsburg: Can't we leave the actual mechanics of this to the Council?

SECRETARY BLACKERBY: If that is in keeping with the motion as passed here.

CHAIRMAN MILLER: Does anybody second Dr. Scott's substitute?

T. A. FRAZER: I second it.

CHAIRMAN MILLER: You have heard the motion. Is there any further discussion on it? If not, those in favor say "aye"; contrary "no". The "ayes" have it and it is carried.

SECRETARY BLACKERBY: The Council has approved the following accounts:

1943

Sept. 15	Voucher Check No. 1		$ 31.00
	V. A. Stilley, M. D., Benton		
	To expense as Councilor of 1st District	31.00	
Sept. 15	Voucher Check No. 2		50.00
	Heimerdinger & Dennis, Certified Public Accountants, Louisville		
	To audit of records of A. T. McCormack, Secretary, P. E. Blackerby, Acting Secretary and A. W. Davis, Treasurer and audit of records of Mrs. Luther Bach, Treasurer of the Woman's Auxiliary, and Mrs. Wm. H. Emrich, Business Manager of "The Quarterly" for the period from August 1, 1942 to August 1, 1943	50.00	
Sept. 15	Voucher Check No. 3		28.51
	Louisville Postmaster, Louisville		
	To July postage	24.56	
	To August postage	3.95	
		28.51	
Sept. 15	Voucher Check No. 4		1.99
	State Department of Health, Louisville		
	To reimbursement for express for Journal	1.99	
Sept. 15	Voucher Check No. 5		63.09
	Bush-Krebs Co., Louisville		
	To 16 copper halftones, portraits of doctors	63.09	
Sept. 15	Voucher Check No. 6		81.16
	F. & V. Manufacturing Co., East Providence, R. I.		
	To 202 bangles, sterling, Louisville 1943	81.16	
Sept. 15	Voucher Check No. 7		20.00
	Fred Haupt, Louisville		
	To basket for A. T. McCormack	20.00	
Sept. 15	Voucher Check No. 8		2.15
	W. K. Stewart Company, Louisville		
	To 1 frame	2.15	
Sept. 15	Voucher Check No. 9		1.50
	American Medical Association, Chicago		
	To 6 copies The Journal A. M. A.	1.50	
Sept. 25	Voucher Check No. 10		16.20
	Collector of Internal Revenue, Louisville		
	To Social Security taxes from January 1, through December 31, 1939	16.20	
Sept. 25	Voucher Check No. 11		598.50
	The Times Journal Publishing Co., Bowling Green		
	To 2,300 September Issue—71 pages including 6 pt tabular	608.00	
	To 2 ads in red	17.00	
		625.00	
	Less credit by Check No. 125	600.00	
	Balance due	25.00	
	Less rebate on 59 Journals short—September issue	6.00	
		19.00	
	To 2,100 October Issue—63 pages	453.00	
	To 6 pt tabular	15.00	
	To 2 ads in red	17.00	
	Return postage	2.00	
		487.00	
	To 1,000 annual programs	92.50	
		598.50	

Sept. 30—Voucher Check No. 12		106.65
P. E. Blackerby, Louisville		
To September Salary, Acting Secretary	135.00	
Less Social Security tax for September	1.35	
Less Withholding tax for September	27.00	28.35
		106.65
Sept. 30—Voucher Check No. 13		49.50
Elizabeth Conklin, Louisville		
To September Salary, Stenographer for Medico-Legal Committee	50.00	
Less Social Security tax for September	.50	
		49.50
Sept. 30—Voucher Check No. 14		185.00
State Department of Health, Louisville		
To Services rendered for month of September	185.00	
Sept. 30—Voucher Check No. 15		25.75
Proctor Sparks, M. D., Ashland		
To expense as Councilor of 9th District	25.75	
Sept. 30—Voucher Check No. 16		63.50
Charles A. Vance, M. D., Lexington		
To expense as Councilor of 10th District	63.50	
Sept. 30—Voucher Check No. 17		14.35
State Department of Health, Louisville		
To reimbursement for express	14.35	
Sept. 30—Voucher Check No. 18		11.10
Collector of Internal Revenue, Louisville		
To Social Security taxes from July 1 through September 30, 1943	11.10	
Sept. 30—Voucher Check No. 19		81.00
Collector of Internal Revenue, Louisville		
To withholding tax from July 1, through September 30, 1943 deducted from Salaries of the following:		
A. T. McCormack, (Deceased)	54.00	
P. E. Blackerby	27.00	
	81.00	
Sept. 30—Voucher Check No.20		35.50
The Pendennis Club, Louisville		
To 15 dinners for councilors and officers of Kentucky State Medical Association	35.50	
TOTAL		$1,466.45

J. A. Orr: I move the accounts be approved and paid.

T. A. Frazer: I second the motion.

President Stilley: A motion is made and seconded we approve the accounts for payment. The motion carried.

A motion to adjourn was regularly made, seconded and carried, and the House of Delegates adjourned sine die at 9:50 a. m.

P. E. Blackerby, Secretary

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NEXT ANNUAL MEETING LOUISVILLE 1944

COUNTY SOCIETY REPORTS

Bracken-Pendleton: The Bracken-Pendleton Medical Society had a meeting at Brooksville, October 29, 1943, with four members present. This was the first meeting since April, although we have met twice with the Licking Valley Society since that time, once at Falmouth and once at Brooksville.

We have two members in the service. Dr. Wm. M. Townsend, of Falmouth and Dr. C. A. Marquardt, of Augusta. They are the only ones in the two counties eligible for service.

At our meeting a motion carried unanimously to communicate with our Senators and Representatives asking them to use their influence to defeat the Wagner-Murray-Dingell Bill.

W. A. McKenney, Secretary.

Campbell-Kenton: The regular monthly meeting of the Campbell-Kenton County Medical Society was held at Speers Hospital on November 4, 1943 with eleven members present. In the absence of the president the meeting was called to order by the vice president, Dr. O. W. Frickman at 9:00 P. M. The minutes of the October and special meetings were read and approved.

Dr. Garrison invited the society to hold its Campbell County meetings at the Campbell County Health Center.

The following communications were read:

A letter from Dr. P. E. Blackerby, Secretary of the Kentucky State Medical Association stating that the House of Delegates had approved a resolution favoring the removal of the $5,000 limitation upon salaries of all public officials and urging us to do likewise.

A letter from the Kenton County Chapter of the Red Cross thanking us for choosing the secretary as Red Cross representative.

A card of thanks from Dr. N. A. Jett and family.

A copy of the resolution adopted by the Christian County Medical Society at Hopkinsville, pertaining to the Wagner-Murray-Dingell Bill was read.

J. D. Northcutt, treasurer, reported a balance of $475.74 in the treasury. This does not include the War Fund donations or donations to defeat the Wagner Bill.

J. H. Caldwell moved that $300.00 be placed at the disposal of Mrs. Luther Bach, as chairman of the Ladies' Committee, for the purpose of entertaining the visiting ladies of the Southern Medical Meeting at Cincinnati, Ohio. Motion passed.

L. Bach moved that the money contributed to combat S-1161 be divided equally between the two counties and that we continue to send telegrams until the fund is exhausted or the

bill is defeated or withdrawn. The motion was seconded by Dr. Miner and passed after discussion by Drs. Heiselman, Schwertman, O'Roarke and Bach.

Charles Baron moved that the place of meeting be changed from Speers Hospital to the Campbell County Health Center and that letters of thanks be sent to Speers Hospital and to the Health Center.

The program consisted of an excellent paper by A. J. Schwertman on "Thrombosis." It was discussed by Drs. Baron, Heiselman, O'Roarke and H. Caldwell.

There being no further business the meeting adjourned.

Robert L. Blitz, Secretary.

Henry: The regular meeting of the Henry County Medical Society was held at the Castle Hotel, New Castle, November 9, 1943 at 7:30 p. m. Dr. Goodwin was to have been host but was unable to attend the meeting on account of death in his family. Dr. Cubbage asked the blessing and a delicious dinner was served. Members present were: G. E. McMunn, President, F. D. Hancock, O. P. Chapman, W. W. Leslie, J. L. Karnes, J. C. Hartman, A. G. Elliston, W. F. Carter, Maurice Bell, Otto Cubbage, R. J. Skidmore, Owen Carroll, Secretary.

Guests present were: Dr. E. S. Allen, Louisville, Mrs. Effie Carl, Winchester, Ohio; Mrs. G. E. McMunn, Mrs. F. D. Hancock, Mrs. W. W. Leslie, Mrs. J. C. Hartman, Mrs. A. G. Elliston, Mrs. W. F. Carter, Mrs. Maurice Bell, Mrs. Otto Cubbage, Mrs. R. J. Skidmore, Mrs. Owen Carroll.

At the conclusion of dinner, Dr. McMunn, President, called the meeting to order for a short business session. The minutes of the last meeting were read by the Secretary and approved as read.

Dr. Carroll called the Society's attention to the pending Wagner-Murray-Dingell National Socialistic Insurance Bill, and to the action of the Christian County Medical Society thereupon. Dr. McMunn expressed the view that the Society should go on record with a resolution in regard to this highly controversial subject, and lead the discussion and explanation of the ramifications of the Bill. Motion was made by Dr. Carroll, seconded by Dr. Bell, and unanimously passed that the President appoint a committee to draft resolutions on the subject and submit them for the Society's approval at the December meeting.

In the absence of the host, Dr. Goodwin, the President asked Dr. Carroll to introduce the guest speaker, E. S. Allen, Louisville. Dr. Allen asked the Society to choose one of two subjects he had prepared, either "Abdominal Pain and Its Interpretation," or "Alcoholism." The Society asked him to read his paper on "Alcoholism," which was a most scholarly and scientific discussion of the subject.

G. E. McMunn appointed the following to draft the resolutions heretofore voted on: Drs. Bell, Chapman, Leslie and Carroll.

It was noted that Dr. Hancock would be host for the December Meeting.

There being no further business, the meeting adjourned.

Owen Carroll, Secretary.

Jefferson: The 868th stated meeting of the Jefferson County Medical Society was held Monday evening, October 18, with 56 members and guests present. Dr. W. W. Nicholson, Vice-President, who presided, called the meeting to order at 8:05 P. M.

The Secretary read the minutes of the previous meeting and they were approved as read.

R. A. Bate, of the Necrology Committee read the committee's resolutions on the death of Dr. L. P. Casper. The resolutions were accepted and filed.

Harry M. Weeter, Chairman of the Program Committee, spoke about holding a trial meeting in the Assembly Room in the Annex of the State Board of Health Building.

O. O. Miller made a motion to have a trial meeting there in the near future to decide the merits of the place. Motion seconded and passed.

The Secretary read a letter from Dr. P. E. Blackerby regarding the proposed amendment to the State Constitution removing the five thousand dollar limit on state salaries. The Council of the State Medical Association unanimously approved this amendment and he asked if the Society favored a resolution for the adoption of the amendment.

The Secretary read a request that the Society send a letter of appreciation and thanks to the reporters of the Courier-Journal and Times, the Kentucky Press Association and the Associated Press for the publicity for the meeting just passed.

Motion was made and seconded to write letters of appreciation. It was put to a vote and passed.

Hugh Leavell said the people interested in the amendment mentioned above, would like to have action taken on the resolution.

M. J. Henry made a motion to endorse the amendment. Motion seconded and passed.

New members elected are: Edward R. Cadden, Robert C. Tate and Milton J. Wilder.

Harry M. Weeter received a letter from Col. William W. Southard, Commanding Officer at

Nichols General Hospital, inviting the Society to meet there November 15. The program will be given by Colonel Southard and the staff.

W. W. Nicholson introduced Reverend Homer W. Carpenter, Pastor of the First Christian Church, who spoke about the War Fund.

Scientific Program 8:40 P. M.

Case Report: "Endometriosis of Sigmoid Causing Intestinal Obstruction." J. B. Lukins and Lanier Lukins. (Read by Lanier Lukins.)

Essay: "One Hundred Cases of Epidemic Meningitis: Diagnosis and Treatment." Kurt Glaser, M. D.

Discussed by Doctors James W. Bruce, Margaret Limper, Hugh R. Leavell, J. G. Sherrill, Gordon S. Buttorff, F. W. Caudill, Doris Spegal, W. W. Nicholson, and closing remarks by Kurt Glaser. The meeting adjourned at 9:40 p. m.

Herman Mahaffey, Secretary

Rowan: The Rowan County Medical Society met September 24, 1943 at the office and home of Dr. G. C. Nickell, Morehead, and elected new officers.

T.A.E. Evans was elected President by unanimous vote, also, I. M. Garred was elected Secretary, also by unanimous vote. The meeting was attended 100 per cent. Those present were T. A. E. Evans, E. D. Blair, G. C. Nickell, Homer L. Nickell and I. M. Garred. There followed a discussion of the Wagner-Murray-Dingell Bill and the Society was unanimous against the bill and voted to have their stand published in the two local newspapers so the community might understand something of the viciousness and nature of the bill.

Dr. H. L. Nickell died of coronary occlusion on the morning of November 9, 1943 at Morehead. He was born October 15, 1887 and graduated at the University of Louisville. He was a veteran of World War I, serving over seas, and practiced in Rowan County the past twenty years and had an active practice at time of death.

I. M. Garred, Secretary

Shelby: On Thursday, October 28, Dr. Lewis Sternberg was host to the Shelby County Medical Society.

Most of the members met at his home on Walnut Street where refreshments were served and then went to the Colonial Inn to enjoy a delightful chicken dinner.

The following members were present: Drs. Alexander, E. S. Allen, Ellis Allen, McMurry, Collins, Beard, Morris, Furnish, Skaggs, McMunn, Richeson, Sternberg, Sleadd, Mack, Nash, Carroll, Dowden, Weakley, Leslie and Dr. Virgil Simpson of Louisville.

In the absence of the President and Vice President, Dr. Sternberg presided.

The minutes of the previous meeting was read and approved.

Dr. Nash presented Virgil Simpson's name as an associate member of the society. Vote was taken and Dr. Simpson was elected unanimously.

The President appointed Drs. Alexander, Weakley and Risk to draw up a resolution on the death of T. E. Bland who had been a member of this society for a good many years.

At this time Dr. Sternberg introduced H. L. Townsend of Louisville who spoke on face lesions and treatment by X-ray. His talk was illustrated by sildes which proved very interesting.

A number of the members discussed the paper.

A motion was made to adjourn. The next meeting will be on Thursday, November 18th, when E. B. Smith will be the host.

C. C. Risk, Secretary.

Union: The Union County Medico-Dental Society met at 7:00 P. M. at Calvert's Restaurant in Morganfield, Ky., November 2, 1943. Following the meal Dr. G. W. Wyatt made a short talk concerning his work with the mobile dental unit of the State Department of Health. He has been working in Union County the past two weeks and gave a nice report of his work in this community.

Those present were: Drs. J. W. Conway, H. B. Stewart, A. L. Bailey, G. W. Wyatt, Bruce Underwood.

There being no further business the meeting adjourned.

Bruce Underwood , Secretary

NEWS ITEMS

Dr. J. R. Burnett who was with the Armed Forces in North Africa has been retired and is back in practice at Middletown, Kentucky.

Among the members of the Armed Forces visiting the State Meeting were: Lieutenant Commander C. J. Armstrong, Major Max Bornstein, Major Davis M. Cox, Major A. C. McCarty, Captain J. Keller Mack, Captain J. B. Marshall, Major E. L. Shiflett, and Captain David S. Traub. Captain A. W. Krupp was also a recent visitor to Louisville.

Dr. Irvin Abell, Louisville, was the guest speaker for the annual Lectureship of the local chapter of Alpha Omega Alpha on November 3rd, held in the Amphitheatre of the Louisville General Hospital. His subject was Retrospect of Medicine in Kentucky.

BOOK REVIEWS

CONVULSIVE SEIZURES, HOW TO DEAL WITH THEM. A Manual for patients, their Family and Friends by Tracy Putman, M. D., Professor of Neurology and Neurosurgery, College of Physicians and Surgeons, Columbia University, Director of Services of Neurology and Neurosurgery, Neurological Institute of New York. 12 illustrations. J. B. Lippincott Company, Philadelphia, Publishers. Price $2.00.

A book written by a famous authority in readable style and interestingly illustrated, Convulsive Seizures will bring enlightenment and hope to thousands of patients and their relatives who are beset with a bewildering and terrifying list of problems. To such questions as "What are the chances of recovery?", "What is epilepsy?", and "What occupation should the patient seek?", this book proposes the answers. Through it, the patient can come to understand and assume the responsibility for his daily regimen and feel a sense of relative security and contentment The book has still a further purpose. Humanitarian and economic motives should impel an improvement of the facilities for caring for the large number of patients; a reformation of the conventional attitudes towards convulsions; a reconsideration of the legal aspects; and a greater measure of support for scientific investigation of the nature and treatment of the disorder.

Convulsive Seizures is not a technical book. Through its clear explanation and guidance, it will give determination and courage to those who come to grips with epilepsy in any or all of its forms. Teachers who have to deal with epileptic pupils will find this book of particular value.

A TEXTBOOK OF MEDICINE: Edited by Russell L. Cecil, . B., M. D., Sc. D., Professor of Clinical Medicine, Cornell University Medical College; Attending Physician, New York Hospital; Visiting Physician, Bellevue Hospital New York City. Associate Editor for Diseases of the Nervous System Foster Kennedy, M.D., F.R.S.E., Professor of Clinical Neurology, Cornell University Medical College; Attending Physician, New York Hospital; Visiting Physician in Charge, Neurological Service, Bellevue Hospital; Consulting Physician, New York Neurological Institute. Sixth Edition, Revised and Entirely Reset. 1566 pages with 195 illustrations. Philadelphia and London: W. B. Saunders Company, 1943. Price $9.50.

One of the really great books in all medical literature makes its appearance in this New Edition featuring a completely new format, new and rewritten discussions of 43 subjects, many new illustrations and extensive revision of the entire book from beginning to end.

154 American teacher-specialists are contributors, maintaining the same high authority for which the book has been notable since the very first edition. Dr. Cecil, the editor, and himself a contributor, has given his usuaul masterly performance in welding these discussions into one orderly, logical smoothly reading volume.

To practitioners, teachers, students, Army and Navy doctors, hospital and reference libraries alike, this volume brings the latest in medicine and brings it in the modern manner just as it is needed to meet today's pressing demands.

DIRECTORY OF MEDICAL SPECIALISTS Certified by American Boards for 1942. Published for the Advisory Board for Medical Specialties by the Columbia University Press, New York. Price $7.00.

Since the first edition of the "Directory of Medical Specialists" appeared, more than four thousand doctors have taken their Board examinations. This second edition therefore contains information about more than eighteen thousand certified Diplomates. And not only is the book larger by that many new Diplomates, but also the information about each doctor is more complete than it was before.

This book is not only a directory to medical specialty but is also an index to a trend in medical development—one which has grown more than twenty-five percent in the last two years. Needless to say, the value of this book to a nation at war is tremendous. To Washington officials, to army and navy administrators, as well as to local and regional selective service executives, the "Directory of Medical Specialists" is becoming increasingly useful.

WE SHALL NOT FORGIVE! Horrors of the German Invasion in Documents and Photographs. Foreign Languages Publishing House, Moscow, Russia, 1942.

This book consists of photographs and documents testifying to the monstrous atrocities perpetrated by Hitler's army of thieves and murderers against the civilian population and captive Red Army men in the Soviet regions which that army has temporarily occupied.

All the documents and a great majority of photographs have been found in various German headquarters captured by the Red Army.

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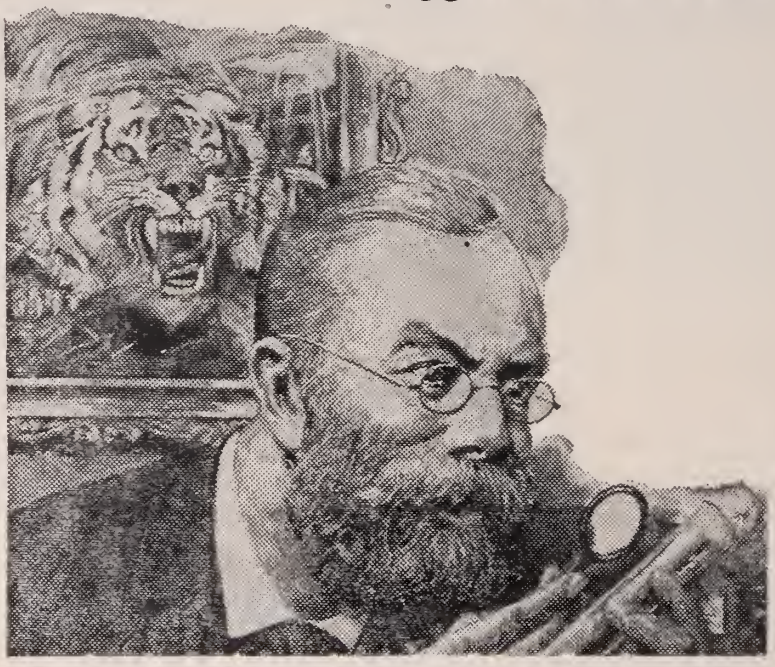
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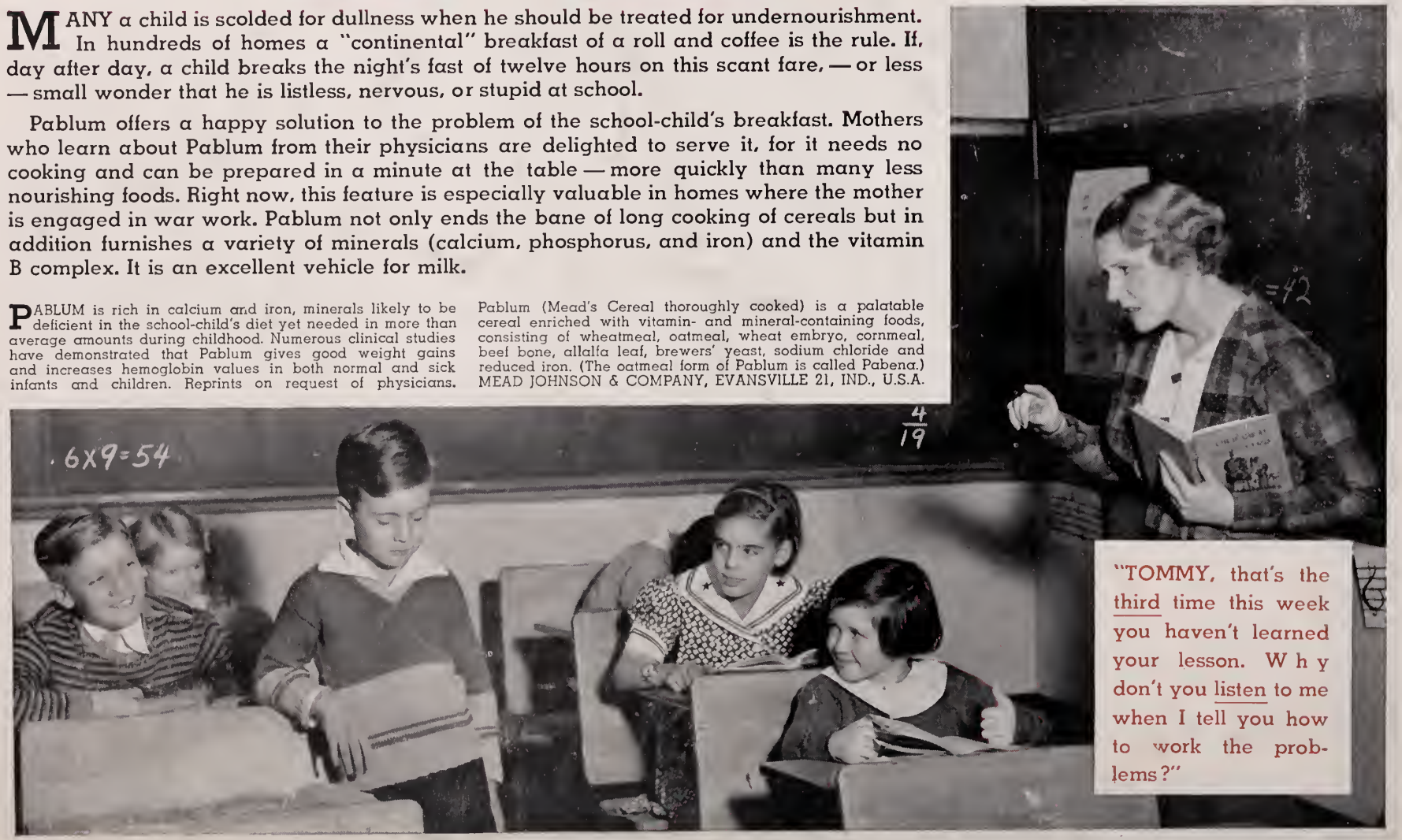
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